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Geologiese Serie
Bulletin No. 23.

UNIE VAN SUID-AFRICA

DEPARTEMENT VAN MYNWESE

WATERBERG-STEENKOOLVELD

BOORGATSTATE VAN GATE 101 tot 143

GEBOOR VIR DIE

DEPARTEMENT VAN MYNWESE

Met aantekeninge deur J. F. Cillie, B.A., B.Sc.
die Brandstofnavorsingsinstituut.

Publikasie van die Afdeling Geologiese Opname



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UNION OF SOUTH AFRICA

DEPARTMENT OF MINES

WATERBERG COALFIELD

RECORDS OF BOREHOLES 101 to 143

DRILLED FOR THE

DEPARTMENT OF MINES

With notes by J. F. Cillie, B.A., B.Sc., and
the Fuel Research Instituut.

Publication of the Geological Survey Division

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LOOSE FOLDERS.

Geological map of the Waterburg Coal-field.

Waterberg Coal-field, Columnar Sections: Poreholes 101 to 143.

DIE WATERBERG-STEENKOOVELD

I.—INLEIDING

Die Waterberg-steenkoolveld is in die noordelike gedeelte van die Distrik Waterberg geleë. In teenstelling met die bergagtige aard van die landstreek na die suide, wat deur die Sisteem Waterberg beslaan word, is hierdie laeveld 'n bosbedekte vlakte bykans sonder uitstaande landtekens en omtrent 3,000 voet bo seespieël geleë. Die enigste opvallende landtekens wes van die Mogolrivier is Koornkop en Nelsonskop 1362 en die Bul, die Koei en die Kalf, tussen 8 en 11 myl noord van Koornkop. Hulle is erosierelike van Holkranssandsteen wat van 50 tot 150 voet bo die omliggende vlakte uitsteek. Oos van die Mogolrivier word die opvallendste landtekens gevorm deur die tafelrante op New York 1201 en verder na die suidweste. Hulle bestaan uit die onderste gedeelte van die Étage Middel-Ecca. Verder noord is Bessaskop, wat hoofsaaklik uit Holkranssandsteen bestaan.

Die Mogolrivier vloei in 'n noordelike rigting deur die sentrale gedeelte van die gebied en is 'n sytak van die Krokodilrivier.

Steenkool is vir die eerste keer in hierdie gebied ontdek toe in 1920 op Grootegeluk 1360 geboor is na water. Daarna is etlike bykomstige gate geboor en die steenkoolkerns daarvan ontleed. Die resultate van die boordery word aangegee deur Trevor en Du Toit in die *South African Journal of Industries*, April, 1922.* Tussen 1920 en 1940 is daar nie verder na steenkool geboor nie.

Gedurende die tydperk 1941 tot 1944 is 'n geologiese opname van die gebied gemaak deur H. N. Visser en J. F. Cillie. Hierdie opname is aangevul deur gatlêers wat deur die Departement van Waterwese geboor is. Aangesien geen blootlegging van die steenkoollae voorkom nie, was die boorgate van groot waarde ten opsigte van:

- (a) die aantal steenkoollae aanwesig;
- (b) 'n korrelasie van die verskillende steenkoollae;
- (c) die deurlopendheid van die steenkoollae;
- (d) die daarstelling van die grense tussen sommige geologiese formasies;
- (e) die vasstelling van die posisies van verskuiwings;
- (f) die verkryging van steenkoolkerns vir analyses.

Die boordery het voortgegaan tot in die middel van 1952 toe 143 boorgate voltooi is.

Die state en analyses van die eerste 100 boorgate is reeds gepubliseer in Bulletins 15, 16 en 21 van die Geologiese Opname. Hierdie Bulletin is opgestel met die doel om die resultate van die laaste 43 boorgate beskikbaar te maak.

* Sien ook Geologiese Opname-memorie 19, Deel III.

THE WATERBERG COALFIELD

I.—INTRODUCTION

The Waterberg coalfield is situated in the northern part of the Waterberg district. In contrast to the mountainous nature of the country to the south, occupied by the Waterberg System, this low-country is a more or less featureless, grass-covered plain that lies about 3,000 feet above sea-level. The only prominent landmarks to the west of the Mogol River are Koornkop on Nelsonskop 1362 and the Bull, the Cow and the Calf, between eight and ten miles to the north of Koornkop. These are erosional relicts of Cave Sandstone that rise from 50 to 100 feet above the level of the surrounding plain. To the east of the Mogol River the most marked landmarks are formed by the flat-topped hills on New York 1201 and farther to the southwest. They consist of the lower division of the Middle Ecca Stage. Farther northwards there is also Bessaskop, consisting of Cave Sandstone in the main.

The Mogol River flows through the central part of the area in a northerly direction and is a tributary of the Crocodile River.

Coal was first discovered in boring for water on the farm Grootegeeluk 1360 in 1920. A few more boreholes were put down later and the coal-cores were analysed. The results of this drilling are recorded by Trevor and Du Toit in the *South African Journal of Industries*, April 1922.* Between 1920 and 1940 no further drilling of coal was undertaken.

During the period 1941 to 1944 a geological survey of the area was made by N. Visser and J. F. Cillié. This survey was supplemented by drilling which was undertaken by the Department of Water Affairs. As there are no exposures of the coal-beds, these boreholes were of great value in respect of:

- (a) the number of coal-seams present;
- (b) a correlation of the various coal-seams;
- (c) the persistence of the coal-seams;
- (d) defining the boundaries between some of the geological formations;
- (e) determining the positions of faults;
- (f) obtaining coal-cores for analysis.

Drilling continued until the middle of 1952 when 143 boreholes were completed.

The records and analyses of the first 100 boreholes have been published in Bulletins 15, 16 and 21 of the Geological Survey. This Bulletin has been compiled in order to make available the results of the last 43 boreholes.

II.—ALGEMENE GEOLOGIE

In hierdie gelyk gebied is die afwateringsstroom baie swak ontwikkel, en die grootste gedeelte van die veld is met sand bedek. In ander gedeeltes het oppervlakkige kalksteen, resente konglomeraat en grintsteen ook 'n aandeel in die bedekking van die onderleënde Sisteem Karoo en ouer formasies. Dagsome is uiters skaars, met die gevolg dat geologiese grense meestal nie vasgestel kon word nie.

Oor die algemeen kom die Karoosedimente voor in die vorm van 'n wye, vlak sinklien, die as waarvan in 'n oos—wes rigting strek. Die posisies van etlike verskuiwings met dieselfde strekkingsrigting is vasgestel. Sommige van hulle het 'n val na die suide en ander weer 'n val na die noorde.

In die suidelike gedeelte van die steenkoolveld is die Karoosedimente op die Sisteem Waterberg neergelê, en in die ooste bestaan die vloer uit graniet en basiese gesteentes wat aan die Bosveldstollingskompleks behoort. Aan die noordekant vorm gesteentes van die Argeiese Kompleks die vloer.

Die volgende opeenvolging van Karoogesteentes is vasgestel:

Onderafdelings van Sisteem Karoo	Verteenwoordigende gesteentes	Dikte
		Vt.
Drakensberglawa.....	Lawa met heelwat amandels.....	400
Holkranssandsteen.....	Fynkorrelrige wit en rooierige sandsteen.....	420
Rooilae.....	Erg fynkorrelrige rooi en sjokoladebruin kleierige sandsteen, moddersteen en merrel	350
Moltenolae.....	Grofkorrelrige wit en pers of bruin sandsteen met verspreide spoelklippers; pers tot bruin en vaal moddersteenlae	20 tot 17
Beaufortlae.....	Rooi, sjokoladebruin en veral vaalkleurige moddersteen..	40 tot 31
Bo-Ecca.....	'n Opeenvolging van tussengelaagde koolstofhoudende skalie lae en steenkoollae	60 tot 28
Middel-Ecca.....	Sandsteen en grintsteen met tussengelaagde koolstofhoudende skalie en sanderige skalie; enkele steenkoollae word aangetref	20 tot 27
Onder-Ecca.....	Skalie en sanderige skalie met sandsteen en grintsteen in die onderste gedeelte	540
Dwyka.....	Tilliet.....	Onseker

Elf boorgate is tot die voor-Karoogesteentes geboor, maar in geeneen Dwyka-tilliet aangetref nie. Op die suidwestelike rand van die gebied kom dit wel voor.

Die indeling van die Sisteem Karoo in onderafdelings is hoofsaaklik volgens litologiese gronde gedoen. Die finale indeling van sekere onderafdelings is egter onmoontlik weens gebrek aan bewyse.

II.—GENERAL GEOLOGY

In this flat country the drainage system is very poorly developed and the major portion of the field is covered with sand. In other portions surface-limestone, cement conglomerate and grit also play a part in covering the underlying Karroo and older formations. Outcrops are very scanty, so that in most instances no geological boundaries could be determined.

The Karroo sediments, on the whole, occur in the form of a wide, shallow incline, with axis trending east to west. A few east—west faults have been located. Some of them have a downthrow towards the south and others towards the north.

In the southern part of the coalfield the Karroo sediments were deposited on the Waterberg System, and in the east the floor consists of granite and basic rocks belonging to the Bushveld Igneous Complex. To the north the floor is formed of rocks of the Archaen Complex.

The following succession of Karroo rocks has been determined:

Subdivisions of Karroo System	Representative rocks	Thickness <i>Ft.</i>
Wesselsberg Lava.....	Lava with fairly abundant amygdales.....	400
White Sandstone.....	Fine-grained white and reddish sandstone.....	420
Marl Beds.....	Very fine-grained red and chocolate-brown clayey sandstone, mudstone and marl	350
Wesselsberg Beds.....	Coarse-grained white and purple or brown sandstone containing scattered pebbles; purple to brown and drab-coloured mudstone	20 to 175
Wesselsberg Beds.....	Red, chocolate-brown, and particularly drab-coloured mudstone	40 to 310
Wesselsberg Ecce.....	A succession of intercalated carbonaceous shale bands and coal-seams	60 to 280
Wesselsberg Ecce.....	Sandstone and grit with intercalated carbonaceous shale and sandy shale; a few coal-seams are encountered	20 to 270
Wesselsberg Ecce.....	Shale and sandy shale with sandstone and grit in the lower portions	540
Wesselsberg Ecce.....	Tillite.....	Uncertain

Eleven boreholes have penetrated into pre-Karroo rocks, but no Dwyka tillite has been found in any of them. It does however, occur in the south-western edge of the coalfield.

The classification of the subdivisions of the Karroo System is based mainly on lithological grounds. Lack of evidence, however, precludes a final classification of certain subdivisions.

III.—MONSTERNEMING EN ONTLEDING

Die opname van die Waterberg-steenkoolveld is in hoofsaak gedoen met die oog op die vasstelling van die waarde daarvan as 'n toekomstige bron van kookskool, en, met hierdie doel voor oë, was die Brandstofnavorsingsinstituut van Suid-Afrika en die Geologiese Opname verantwoordelik vir die beskrywings van steenkooltipes en eersgenoemde vir die monsterneming en ontleding van die steenkool wat deurgeboor is in die boorgate wat in hierdie verslag vermeld word.

Die kerns is deurgaans by die boorplek ondersoek, en monsters van die steenkool is ter plaatse geneem in die aanwesigheid van die boorman en medewerking met 'n beampte van die Afdeling Geologiese Opname. Na sorgvuldige meting en raming van die kern wat verkry is, is die afsonderlike laagkerns oorlank gesplyt vir ondersoek en vervolgens in onderdele verdeel vir ontleding volgens die tipe steenkool of volgens toekomstige afboudikte. In die algemeen is onsuivbare aardagtige lae van 3 duim en meer in dikte van die monsters uitgesluit in die veronderstelling dat verwydering daarvan in iedere geval na ontginning op die sorteerbande sou plaasvind. Die uitdrukking „nie gemonster nie” (N.G.) het die dergelike uitsluitings betrekking asook op stukke steenkoolkern wat geen analitiese ondersoek regverdig nie.

Alle monsters is in sakke geplaas, van etikette voorsien en na die Institusione laboratorium in Pretoria afgestuurd vir die bereiding van ontledingsmonsters. Hierdie prosedure en die ontledingsmetodes wat toegepas is, strook met die verskillende standaardspesifikasies wat deur die Suid-Afrikaanse en Britse Institusione vir Standaardse voorgeskryf word.*

Voorlopige dryfstof- en sinkstoftoetse is uitgevoer om te beraam in hoeverre die kwaliteit verbeter kan word deur 'n wasproses. Die matkool van die soort waarmee stoom verwek word, is geskei by 'n soortlike gewig van 1.58; voorskieding word die kool vergruis om deur 'n sif met een duim vierkantmaas te gaan. Glanskool wat moontlik verkooksingseienskappe besit, is geskei by 'n klein soortlike gewig. Monsters uit boorgate 101 tot 113 is afgeskei by 'n soortlike gewig van 1.45 nadat die kool vergruis is sodat dit deur 'n sif met een duim vierkantmaas kan gaan. Monsters uit boorgate 114 tot 143 is afgeskei by 'n soortlike gewig van 1.40 nadat die kool vergruis is sodat dit deur 'n sif met drie-sestiende duim vierkantmaas kan gaan. Hierdie wysiging is ingevoer om die asgehalte van die dryfstof af te bring tot 'n aanneemlike waarde, want eksperimente by die Brandstofnavorsingsinstituut het getoon dat die sikloonwater in staat is om hierdie grootte steenkool doeltreffend te skei. In gevalle waar dit geen nuttig doel sou dien om die dryfstof en sinkstoffraksies afsonderlik te ontleed nie, is hulle voor ontleding weer saamgevoeg.

Voordat hulle ontleed is, is monsters sodanig vergruis en die grootte van die stukke verminder om deur 'n sif van 16 maas B.S. te kan gaan. Na lugdroging totdat ewewigtige vogtigheidstoestand bereik is, is verteenwoordigende gedeeltes van die monsters wat met die sif van 16 maas verkry is, fyn verpoeier sodat dit deur 'n sif van 60 maas B.S. kan gaan; dit is naamlik die grootte wat voorgeskryf word vir die uitvoering van die ontledingsprosedure wat verder volg.

Die ontleding wat op die luggedroogde monsters uitgevoer is, het gewoonlik uit 'n kortanalise bestaan asmede 'n bepaling van verhittingswaarde en 'n oordeel van die swelvermoë by verkoling deur die Kroessweltoets. In die volgende aantekeninge word die prosedure by elkeen van hierdie toetse kort saamgevat:

* (a) Suid-Afrikaanse Standaardspesifikasie S.A. no. 13 van 1937, „Standard Methods for the Sampling of Coal in South Africa.”

(b) Britse Standaardspesifikasie B.S.S. no. 1016 van 1942, „British Standard Methods for the Analysis and Testing of Coal and Coke.”

III.—SAMPLING AND ANALYSES

The Waterberg coalfield has been surveyed mainly from the point of view of establishing its value as a future source of coking coal, and with this object the Fuel Research Institute of South Africa and the Geological Survey have been responsible for the descriptions of coal-types and the former for the sampling and analysis of the coal-seams intersected in the boreholes referred to in this report.

The cores were invariably examined and the coal sampled at the drilling site in the presence of the driller in co-operation with an officer of the Geological Survey Division. After careful measurement and estimation of core recovery the individual seam-cores were split longitudinally for inspection and subsequently divided into sub-sections for analysis according to type of coal or to possible future mining width. In general, whenever dirt bands of 3 inches or more in thickness occurred, these were rejected from the samples on the assumption that exclusion would in any event take place on the picking-belts after mining. The term N.S. (not sampled) refers to such exclusions and also to lengths of coal-core too inferior in quality to merit analytical examination.

All samples were bagged, labelled, and transported to the Institute's laboratories in Pretoria for the preparation of analysis samples. This procedure and the methods of analysis adopted are in conformity with the various standard specifications laid down by the South African and British Standards Institutions.*

Preliminary float and sink tests were carried out to assess the improvement in quality obtainable by washing. The dull coals of the steam-raising variety were separated at a specific gravity of 1.58, the coal being crushed to pass a one inch square mesh screen prior to separation. Bright coals with possible coking properties were separated at a lower specific gravity; samples from borehole 101 to 113 were separated at a specific gravity of 1.45, the coal being crushed to pass a one inch square mesh screen; samples from boreholes 114 to 143 were separated at a specific gravity of 1.40, the coal being crushed to pass three-sixteenths inch square mesh screen. This modification was introduced in order to lower the ash content of the float to an acceptable value, experiments conducted at the Fuel Research Institute having demonstrated that the cyclone washer is capable of effecting an efficient separation on this size of coal. Where it was considered that no useful purpose could be served by analysing the float and sink fractions separately, these were combined prior to analysis.

Prior to analysis samples were crushed and reduced in particle size to pass a 16 mesh B.S. sieve. After air-drying until equilibrium moisture conditions had been attained representative portions of the 16 mesh samples were finely pulverised to pass a 60 mesh B.S. sieve, viz. the size specified for carrying out the subsequent analytical procedure.

The analytical work carried out on the air-dried samples generally comprised proximate analysis and included a determination of calorific value and an assessment of swelling power on carbonisation by the Crucible Swelling Test. The following notes broadly outline the procedure in each of these tests:

* South African Standard Specification S.A. No. 13 of 1937, "Standard Methods for the Sampling of Coal in South Africa."

* British Standard Specification B.S.S. No. 1016 of 1942, "British Standard Methods for the Analysis and Testing of Coal and Coke."

KORTANALISE

Voggehalte—verteenwoordig die verlies aan gewig (uitgedruk as 'n persentasie) bepaal by die verhitting van 1 gm. luggedroogde steenkool by 'n temperatuur van 105°–110° vir een uur).

In seldsame gevalle, wanneer die voggehalte 4 persent te bowe gaan (waarnaamlik 'n steenkool van laer graad aandui) word 'n onaktiewe gas, byvoorbeeld suurstofvrye stikstof, aanhoudend deur die oond gesirkuleer terwyl die bepaling uitgevoer word ten einde oksidasie van die steenkool te verhoed.

Asgehalte—verteenwoordig die residu na volledige verbranding van 1 gm. steenkool in 'n moffeloond wat op 'n temperatuur van 775° C $\pm$ 25° C gehou word. Die steenkool word in 'n silikabakkie gehou, en lug word voortdurend deur die oond gesirkuleer. Die resultaat word weereens as 'n persentasie uitgedruk.

Gehalte aan vlugtige bestanddele—verteenwoordig die verlies aan gewig wat ontstaat deur 1 gm. steenkool in 'n bedekte silikakroesie van standaardafmetings 1 1/2" by 1 1/2" by 1 1/2" op 925° C. $\pm$ 15° C. vir 7 minute te verhit en word bereken deur die gewig van die vog in die steenkool aanwesig af te trek en die resultaat as 'n persentasie uit te druk.

Gehalte aan vastekoolstof—'n syfer wat verkry word deur die som van die gehalte aan vog, as en vlugtige bestanddele, almal as persentasies uitgedruk, van 1 af te trek.

Verhittingswaarde—Hierdie waarde, uitgedruk in verdampingseenhede (lb./lb.) word bereken uit die mate van hitte wat ontwikkel by die verbranding van 1 gm. steenkool onder 30 atmosfere druk in 'n Berthelot of Scholestin bombkalorimeter.

Die bepaling word uitgevoer volgens Suid-Afrikaanse Standaardspesifikasie S.A. no. 5 van 1940, „The Determination of the Comparative Calorific Values of Coals in South Africa.” Een verdampingseenheid of lb./lb. staan gelyk aan 970 Britse Termale Eenhede per lb. of 539 kalorieë per gram.

Kroessweltoets—Die swelsyfer verteenwoordig die verhouding van die aanvanklike tot die uiteindelijke volume van 1 gm. steenkool na sterk verhitting onder normale toestande. Die profiel van die kooksknoppie wat verkry word, is 'n maatstaf van die sweleienskappe van die steenkool by verkoling.

'n Syfer 1Ag beteken 'n residu wat beslis 'n kookstruktuur toon maar geen swelvermoë nie. F dui 'n residu aan wat geredelik krummelrig is en geen kookstruktuur toon nie. P dui 'n residu in poeivorm aan. 'n Syfer van 2 tot 9 of meer dui bepaalde verkooksingseienskappe aan.

Die deel van die opmetingswerk in die Waterberg-steenkoolveld wat waarskynlik die belangrikste is, is dié wat betrekking het op die bepaling van die omvang, waarde en ligging van kooksteen in daardie veld, en waar individuele steenkoollae ondersoek word, word noukeurige aandag hieraan bestee.

Wat boorgatmonsters betref, is dit slegs moontlik om betroubare aanduiding van die aanwesigheid van kookskool te verkry en niks meer nie, maar afdoende bewys is gelewer dat die steenkool van geringer digtheid, waaronder die skoen glansende gedeeltes van die lae uit die Bo-Ecca van hierdie omgewing, wel deeglik goed ontwikkelde verkooksingseienskappe besit. Die gelaagdheid van die glansende

PROXIMATE ANALYSIS

Moisture content—represents the loss of weight (expressed as a percentage determined after heating 1 gm. of air-dry coal at 105° for 1 hour).

In rare cases, where the moisture content exceeds 4 per cent, indicating a coal of lower rank, an inert gas, e.g. oxygen-free nitrogen, is continuously circulated through the oven during the determination to prevent oxidation of the coal.

Ash content—represents the residue after complete combustion of 1 gm. of coal in a muffle-furnace maintained at $775^{\circ}\text{C} \pm 25^{\circ}\text{C}$. The coal is contained in a silica dish, and air is continuously circulated through the muffle. The result is again expressed as a percentage.

Volatile matter content—represents the loss of weight obtained by heating 1 gm. of coal contained in a covered silica crucible of standard dimensions at $925^{\circ}\text{C} \pm 15^{\circ}\text{C}$ for 7 minutes and is calculated by subtracting the weight of moisture present in the coal and expressing the result as a percentage.

Fixed carbon content—a figure obtained by subtracting the sum of moisture, ash, and volatile matter contents, all expressed as percentages, from 100.

Calorific value—This value, reported in Evaporative Units (lb./lb.), is calculated from the amount of heat generated by combusting 1 gm. of coal in oxygen at 30 atmospheres pressure in a Berthelot or Scholes type of combustion bomb.

The determination is carried out according to South African Standard Specification S.A. No. 5 of 1940, "The Determination of the Comparative Calorific Values of Coals in South Africa." One Evaporative Unit or lb./lb is equivalent to 970 British Thermal Units per lb. or 539 calories per gm.

Crucible swelling test—The swelling-number or swelling-index represents the ratio of the initial to the final volume of 1 gm. of coal after heating strongly under standard conditions. The profile of the coke-button obtained is a measure of the swelling propensities of the coal on carbonisation.

An index of 1Ag denotes a residue of definite coke structure but no swelling. F denotes a residue easily friable and possessed of no coke structure. P denotes a residue in powder form. An index of 3 or more indicates definite coking possibilities.

Probably the most important part of the survey work in the Waterberg area concerned with the proving of resources of coking coal, and in the examination of individual seams this aspect is given close attention. With borehole samples it is not possible to do more than obtain reliable indications of the presence of seams of coking coal, but it has been proved conclusively that the coals of lower density, comprising the bright clean portions of the Upper Ecca seams from this locality, do possess well-developed coking propensities. The laminated structure of the bright Upper Ecca coals, however, and the high ash contents of the associated and often heavy coals invariably preclude the possibility of easy separation of coking coal with a reasonably low ash content without recourse to fine crushing.

Float and sink tests on the samples from the boreholes covered by Bulletins 5, 16 and 21 were done on coal crushed to pass a 16 mesh B.S. sieve or a one inch square mesh screen, but both these procedures suffer from disadvantages as regards

uit die Bo-Ecca asmede die hoë asgehalte van die steenkool wat daarmee gepaard gaan en wat in baie gevalle skalieagtig is, skakel egter bykans deurgaans die moontlikheid uit dat kookskool met 'n redelike lae asgehalte maklik afgeskei kan word sonder om die steenkool fyn te vergruis.

Dryfstof- en sinkstof-toetse op monsters uit die boorgate wat in Bulletins 16 en 21 beskrywe is, is gedoen op kool wat vergruis is sodat dit deur 'n sif van 16 maas B.S.-grootte of 'n sif met 1 duim vierkantmaas kan gaan. In soverre die die koollae van die Bo-Ecca aangaan, het albei hierdie prosedures nadele. Eerstgenoemde metode gee resultate wat nie toepaslik is op growwe steenkool nie, en daar is ook nie 'n omrekeningsfaktor wat met 'n redelike mate van akkuraatheid gebruik kan word nie. Die laasgenoemde metode gee dryfstoffraksies waarvan die asgehalte ongeveer 14 persent is, en kooks wat daarvan gemaak is, sal 'n asgehalte van 20 persent of meer hê. Soos hierbo vermeld, kan die sikloonwasser resultaat lewer wat ooreenstem met die dryfstof- en sinkstof-toetse as kool gebruik word wat vergruis is om deur 'n sif met drie-sestiende duim vierkantmaas te gaan. Aangesien 'n dryfstoffraksie waarvan die asgehalte 10 persent is, die beoogde doel was, is die monsters afgeskei by 'n soortlike gewig van 1.40. Al die monsters van lae uit die Bo-Ecca, uit boorgate 113 tot 143, is op hierdie manier behandel.

In enkele gevalle is monsters van lae uit die Middel-Ecca wat 'n groot proporsie glanskool bevat het, geflotteer by twee soortlike gewigte, naamlik 1.58 en 1.35, 1.40 of 1.45. Die doel met die flottering was om te bepaal in watter mate hierdie monsters swelsteenkool bevat. In hierdie gevalle word verstrek die analyse van die dryfstof by die laer soortlike gewig, van die intermediêre fraksie van die berekende dryfstof by 1.58 en die asgehalte van die sinkstof by 1.58 soortlike gewig.

In die uiteensetting van die monstertabelle is die diktes wat aangegee word die herwinde diktes, en die analyses van die ru-steenkool verwys na die monster soos dit geneem is. Die volgende afkortings word gebruik:

B.N.I.....	Brandstofnavorsingsinstituut.
V.W.....	Verhittingswaarde.
H ₂ O.....	Vog.
V.B.....	Vlugtige bestanddele.
V.K.....	Vaste koolstof.
Sw. syfer.....	Soortlike gewig.
lb./lb.....	Pond per pond.

Upper Eccla coal-seams. The former method gives results which are not applicable to coarser coal, nor can any conversion factor be used with reasonable accuracy; the latter method results in float fractions with ash contents of the order 14 per cent, which would yield cokes with ash contents of 20 per cent or more. As mentioned above, the cyclone washer can yield results on coal crushed through three-sixteenths inch square mesh screen which are comparable with the float and sink tests. An ash content of 10 per cent in the float fraction was aimed at, and for this reason a specific gravity of 1.40 was chosen for separating the samples; the Upper Eccla seam samples from boreholes 113 to 143 were treated in this manner.

In a few cases samples of the Middle Eccla seams which contained large concentrations of bright coal were floated at two specific gravities, namely 1.58 and 1.35, 1.40 or 1.45. The object of floating at the lower specific gravity was to determine in how far these samples contained swelling coal. In these cases the analysis of the float at the lower specific gravity, of the intermediate fraction, of the calculated float at 1.58, and the ash content of the sink at 1.58 specific gravity are all given.

In the analysis of sample tables the thicknesses given are recovered thicknesses, and the raw coal analysis refers to the sample as taken. The key to the abbreviations used is as follows:

F.R.I.....	Fuel Research Institute.
C.V.....	Calorific value.
H ₂ O.....	Moisture.
V.M.....	Volatile matter.
F.C.....	Fixed carbon.
Sw. No.....	Swelling number.
S.G.....	Specific gravity.
lb./lb.....	Pounds per lb.

IV.—DIE BOORGATSTATE—THE BOREHOLE RECORDS

BOORGAT 101 : MC CABES VLEY 1371 : BOREHOLE 101

Kern $3\frac{1}{2}$ dm.Core $3\frac{1}{2}$ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Grond en moddersteen (stamp-boor)	94	0	94	0	Soil and mudstone (jump-drill)
Moddersteen, ligvaal, met ligrooi deeltjies in boonste gedeelte	8	9	—	—	Mudstone, light grey, with light pink portions in top part.
Moddersteen, vaal en vaalblou, met swart skalie in onderste 12 dm.	38	4	141	1	Mudstone, grey and greyish-black with black shale in bottom in.
Skalie, kleierig by bo-ent en koolstofhoudend na onder	1	3	142	4	Shale clayey at top and carbonaceous towards bottom.
Glanskool, gelaag, piriethoudend, met 4 dm. skalie en gelaagde glanskool by onderent	2	1	—	—	Coal, bright, banded, pyritic, with 4 in. shale and banded bright coal at bottom
Moddersteen, plek-plek skalieagtig, ligvaal tot donkerkleurig, met 'n wryfvlak naby bo-ent	5	5	—	—	Mudstone, shaly in places, light grey to dark-coloured, with slickenside near top.
Skalie en gelaagde glanskool.....		3	—	—	Shale and banded bright coal.
Glanskool, gelaag, skalieagtig in onderste 1 dm.	1	0	—	—	Coal, bright, banded, shaly bottom 1 in.
Skalie.....		6	—	—	Shale.
Glanskool, gelaag, skalieagtig in onderste 3 dm.	1	3	—	—	Coal, bright, banded, shaly bottom 3 in.
Skalie, kleierig, lig- tot donker-vaal, met wryfvlakke in onderste 10 dm.	2	8	—	—	Shale, clayey, light to dark grey with slickensides in bottom in.
Glanskool, gelaag, piriethoudend na bo-ent met dun skalielagies na onder	1	3	156	9	Coal, bright, banded, pyritic towards top and with thin shale bands towards bottom.
Skalie, swart, met vier glanskool-lagies van 6 dm.	5	2	161	11	Shale, black, with four 6-in. bright coal-bands.
Glanskool, gelaag; enkele dun skalielagies naby onderent	1	5	—	—	Coal, bright, banded; occasional thin shale bands near bottom
Skalie, steenkoolagtig by bo-ent..		$6\frac{1}{2}$	—	—	Shale, coally at top.
Glanskool, gelaag, skalieagtig in onderste 2 dm.		8	—	—	Coal, bright, banded, shaly bottom 2 in.
Skalie.....		$4\frac{1}{2}$	—	—	Shale.
Glanskool, gelaag, met enkele dun skalielagies		$11\frac{1}{2}$	—	—	Coal, bright, banded, with occasional thin shale bands.
Skalie.....		$3\frac{1}{2}$	—	—	Shale.
Glanskool, gelaag, kalsiethoudend in onderste 2 dm.	1	9	167	11	Coal, bright, banded, calcitic bottom 2 in.
Skalie, swart.....	2	11	—	—	Shale, black.
Skalie en steenkool.....	1	11	—	—	Shale and coal.
Glanskool, gelaag, baie minderwaardig in middelste 12 dm.	2	6	—	—	Coal, bright, banded, very inferior in middle 12 in.
Skalielae, breed, en breë lae skalieagtige, gelaagde glanskool	2	5	—	—	Shale bands, broad, and broad bands of shaly, banded bright coal.
Glanskool, gelaag, kalsiethoudend by bo-ent en skalieagtig by onderent, effens piriethoudend		$7\frac{1}{2}$	—	—	Coal, bright, banded, calcitic top and shaly at bottom slightly pyritic.
Skalie.....		$4\frac{1}{2}$	—	—	Shale.
Glanskool, gelaag, met kalsiethoudende, skalieagtige lagies in boonste $3\frac{1}{2}$ dm.	1	5	180	1	Coal, bright, banded, with calcitic shaly layers in top $3\frac{1}{2}$ in.
Skalie, swart, met twee dun steenkoolagies	2	5	—	—	Shale, black, with two thin coal bands.

Bg. 101 (verv.)

B.H. 101 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
glanskool, gelaag.....		5½			Coal, bright, banded.
alie.....		3			Shale.
alie tussengelaag met gelaagde glanskool		8½	183	11	Shale interbedded with banded bright coal.
glanskool, gelaag, met dun skalie- agies na bo en minderwaardige, kalsiethoudende lae in onderste 9 dm., skalieagtig in onderste 1 dm.	3	2			Coal, bright, banded, with thin shale bands towards top and inferior, calcitic bands in bottom 9 in., shaly in bottom 1 in.
alie en tussengelaagde glanskool en skalie met twee skalielae by bo-ent; hoofsaaklik skalie	6	9			Shale and interbedded bright coal and shale with two shale bands at top; mainly shale.
glanskool, gelaag, skalieagtig in boonste en onderste 2 tot 3 dm.; n korrelrige, piriethoudende lagie van 'n halfduim 6 dm. van onder af	3	0			Coal, bright, banded, shaly in top and bottom 2 to 3 in.; 1 ½-in. granular, pyritic band 6 in. from bottom.
alie.....		3½			Shale.
alie tussengelaag met gelaagde glanskool	1	5			Shale interbedded with banded bright coal.
alie.....		3½			Shale.
glanskool, gelaag, met dun skalie- agies in onderste 7 dm.	2	2			Coal, bright, banded, with thin shale bands in bottom 7 in.
alie.....		1½			Shale.
glanskool, gelaag, kalsiet- en piriethoudend		11½			Coal, bright, banded, calcitic and pyritic.
alie.....		2½			Shale.
glanskool, gelaag, skalieagtig in onderste 3 dm., effens piriethou- dend	2	8½	205	0	Coal, bright, banded, shaly in bottom 3 in., slightly pyritic.
alie, swart, met vier lae (3 tot 8 dm.) tussengelaagde skalie en steenkool; wryfvlak in middel	7	9	212	9	Shale, black, with four 3-in. to 8-in. bands of interbedded shale and coal; slickenside in middle.
glanskool, gelaag, met dun skalie- agies		7			Coal, bright, banded, with shale bands.
alie.....		1½			Shale.
glanskool, gelaag.....		5½			Coal, bright, banded.
alie.....		2½			Shale.
glanskool, gelaag, skalieagtig in boonste 6 dm.	1	9	215	10½	Coal, bright, banded, shaly in top 6 in.
piriethoudende en steenkool- agtige lagie		2½			Sideritic and coaly band.
glanskool, gelaag, erg sideriethou- dend, piriethoudend na onder	1	4			Coal, bright, banded, very side- ritic, pyritic towards base.
alie, swart, met drie lagies (3 tot 10 dm.) tussengelaagde skalie en steenkool	9	7			Shale, black, with three 3-in., to 10-in. bands of interbedded shale and coal.
alie tussengelaag met steenkool	2	4			Shale interbedded with coal.
glanskool, gelaag, sideriet- en piriethoudend	1	3			Coal, bright, banded, sideritic and pyritic.
alie, koolstofhoudend.....	1	5			Shale, carbonaceous.
alielae, breed, en gelaagde glans- koolae om die beurt	3	1			Shale bands, broad, alternating with bands of banded bright coal.
alie tussengelaag met steenkool, effens piriethou- en sideriethoudend in middelste 6 dm.	2	6			Shale interbedded with coal, slightly pyritic and sideritic in middle 6 in.
alie.....		8			Shale.
alie tussengelaag met steenkool	7	8			Shale interbedded with coal.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Skalie en gelaagde glanskool, sideriethoudend na onder	4	8	—	—	Shale and banded bright coal sideritic towards bottom.
Skalielae, breed, en breë, gelaagde glanskoollae	3	8	—	—	Shale bands, broad, and broad bands of banded bright coal.
Glanskool , gelaag, met dun skalie-lagies, effens sideriethoudend in middelste 4 dm.	11	—	—	—	Coal, bright, banded, with thin shale bands, slightly sideritic in middle 4 in.
Skalielae, breed, en breë, gelaagde glanskoollae	3	8	—	—	Shale bands, broad and broad bands of banded bright coal.
Skalie, koolstofhoudend, met baie dun lagies tussengelaagde skalie en steenkool	6	10	—	—	Shale, carbonaceous, with many thin bands of interbedded shale and coal.
Skalie tussengelaag met gelaagde glanskool, erg sideriethoudend	2	7	—	—	Shale interbedded with banded bright coal, very sideritic.
Skalie, swart, met 6 dm. glanskool 8 dm. van onder af	3	6	—	—	Shale, black, with 6 in. bright coal 8 in. from bottom.
Skalielae, breed, en breë, gelaagde glanskoollae, sideriethoudend	5	5	—	—	Shale bands, broad, and broad bands of banded bright coal sideritic.
Skalie en tussengelaag met steenkool, piriet- en sideriethoudend	2	2½	—	—	Shale interbedded with coal pyritic and sideritic.
Skalielae, breed, en breë, gelaagde glanskoollae om die beurt	10	7½	290	0	Shale bands, broad, alternating with broad bands of banded bright coal.
Skalie, swart, en koolstofhoudende skalie met twee lae (6 dm.) erg sideriethoudende glanskool in boonste 3 vt., vier glanskoollae (3 tot 4 dm.) in middel, een laag (11 dm.) en vyf lae (1 tot 6 dm.) glanskool in onderste helfte	12	9	—	—	Shale, black, and carbonaceous shale with two 6-in. very sideritic bright coal bands in top 3 ft., four 3-in. to 4-in. bright coal bands in middle one 11-in. and five 1-in. to 6-in. bright coal-bands in bottom half.
Skalie en gelaagde glanskool.....	1	10	—	—	Shale and banded bright coal.
Skalie, swart, met 10 dm. erg sideriethoudende glanskool 12 dm. van bo af	7	6	—	—	Shale, black, with 10 in. very sideritic bright coal 12 in. from top.
Skalie tussengelaag met sideriethoudende steenkool	2	5	—	—	Shale interbedded with sideritic coal.
Skalielae, breed, en breë glanskoollae om die beurt, sideriethoudend in onderste 2 vt.	11	0	—	—	Shale bands, broad, alternating with broad bright coal bands sideritic in bottom 2 ft.
Skalie, swart, en koolstofhoudende skalie met veertien lae (1 tot 8 dm.) tussengelaagde skalie en steenkool; steenkoolagtige skalie in onderste deel; baie wryfvlakke	34	4	—	—	Shale, black, and carbonaceous shale with fourteen 1-in. to 8-in. bands of interbedded shale and coal; coaly shale in bottom portion; many slickensides.
Skalie, koolstofhoudend, skalieagtige steenkool, en steenkoolagtige skalie	8	3	—	—	Shale, carbonaceous, shaly coal and coaly shale.
Skalielae, breed, koolstofhoudend; breë, gelaagde glanskoollae en skalieagtige matkoollae om die beurt	4	2	—	—	Shale bands, broad, carbonaceous broad, banded bright coal and shaly coal bands alternate.
Skalie, boonste helfte kleierig en ligbruin	1	6	—	—	Shale, top half clayey and light brown.
Skalie en steenkool.....	7	—	—	—	Shale and coal.
Skalie, vaal, kleierig, fossilhoudend	3	11	—	—	Shale, grey, clayey, fossiliferous.

Bg. 101 (verv.)

B.H. 101 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
skalie, swart, en koolstofhoudende skalie met 'n paar dun, skalie- agtige glanskoolagies en effens sanderig tussen 392 en 393 vt.	20	2	398	5	Shale, black, and carbonaceous shale with a few thin, shaly bright coal-bands and slightly sandy between 392 and 393 ft.
skalie, koolstofhoudend, skalie- agtige steenkool, en steenkool- agtige skalie	10	0	—	—	Shale, carbonaceous, shaly coal, and coaly shale.
skalie, swart, en koolstofhoudende skalie met 'n bietjie steenkool- agtige skalie	18	8	—	—	Shale, black, and carbonaceous shale with a little coaly shale.
skalie en skalieagtige matkool, gemeng	2	0	—	—	Shale and shaly dull coal, mixed.
skalie, koolstofhoudend, en swaar matkool met enkele pirietskoolle	4	5	433	6	Shale, carbonaceous, and heavy dull coal with occasional pyrite nodules.
Matkool, glansend, met enkele groot pirietskoolle	4	5	—	—	Coal, dull, lustrous, with occa- sional large pyrite nodules.
Matkool, glansend, met piriethou- dende, skalieagtige lagies (1½ dm., 2 dm., en 3 dm.) onder- skeidelik 7 dm. van bo af, 12 dm. van onder af, en by onder- ent	4	2	—	—	Coal, dull, lustrous, with 1½-in., 2-in., and 3-in. pyritic, shaly bands 7 in. from top, 12 in. from bottom, and at bottom respectively.
Steenkool, hoofsaaklik matkool, met wryfvlakke in onderste 12 dm., piriethoudend	3	0	445	1	Coal, mainly dull, with slicken- sides in bottom 12 in., pyritic.
Sandsteen, baie fynkorrelrig, effens kruisgelaag, swart, donkervaal, vaalbruin, mikahoudend	8	3	—	—	Sandstone, very fine-grained, slightly cross-bedded, black, dark grey, greyish-brown, mica- ceous.
Sandsteen, grofkorrelrig tot grinte- rig, vuilvaal	10	—	454	2	Sandstone, coarse-grained to gritty, dirty grey.
Steenkool, hoofsaaklik matkool, met 'n veranderlike lagie (1½ tot 3 dm.) sandsteen 1 dm. van bo af skalie en sandsteen.....	1	1	—	—	Coal, mainly dull, with an irregular 1½-in. to 3-in. sandstone band 1 in. from top.
Matkool, meer glansend na onder	10	—	456	1	Shale and sandstone.
skalie en sandsteen.....	1	7½	—	—	Coal, dull, brighter towards bottom.
Steenkool, hoofsaaklik matkool, effens piriethoudend	3½	—	—	—	Shale and sandstone.
Steenkool, erg kalsiethoudend...	2	0	—	—	Coal, mainly dull, slightly pyritic.
Steenkool, gemeng, piriethoudend...	3	—	—	—	Coal, bright, very calcitic.
Steenkool, gemeng, piriethoudend...	10	—	—	—	Coal, mixed, pyritic and calcitic.
Matkool, skalieagtig by bo-ent...	7	—	—	—	Coal, dull, shaly at top.
Steenkool, gemeng, piriethoudend...	4	—	—	—	Coal, mixed, pyritic and shaly.
Steenkool, gelaag, piriethoudend...	1	1	—	—	Coal, bright, banded, pyritic.
Matkool, piriethoudend.....	11½	—	—	—	Coal, dull, pyritic.
skalie, koolstofhoudend, piriethou- dend	3	—	—	—	Shale, carbonaceous, pyritic.
Steenkool; lae matkool en gemeng- de steenkool om die beurt	2	6½	—	—	Coal; alternating bands of dull and mixed coal.
Piriethoudende laag.....	1	—	—	—	Pyritic band.
Steenkool, gemeng, piriethoudend...	8	—	467	7	Coal, mixed, pyritic.
Sandsteen, fyngelaag, baie fyn- korrelrig, ligbruin, donker- kleurig, swart, en ligvaal, mika- houdend, plek-plek met gol- wende gelaagdheid	14	10	—	—	Sandstone, laminated, very fine- grained, light brown, dark- coloured, black, and light grey, micaceous, with wavy banding in places.

Bg. 101 (verv.)

B.H. 101 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	<i>Vt. Ft.</i>	<i>Dm. In.</i>	<i>Vt. Ft.</i>	<i>Dm. In.</i>	
Sandsteen, fyngelaag, fynkorrelrig, ligbruin, donkerkleurig, en swart, effens mikahoudend, met dun, growwerkorrelrige lagies	7	4	—	—	Sandstone, laminated, fine-grained, light brown, dark-coloured, and black, slightly micaceous, with thin, coarser-grained bands.
Sandsteen; dun, fyn- tot middelkorrelrige, vuilvaal sandsteenlagies en fynkorrelrige, swart sandsteenlagies om die beurt, met 'n bietjie swart, skalieagtige sandsteen en sanderige skalie	5	6	—	—	Sandstone; alternating thin bands of fine- to medium-grained, dirty grey sandstone and fine-grained, black sandstone, with a little black, shaly sandstone and sandy shale.
Sandsteen, middel- tot grofkorrelrig, witvaal, effens veldspaties, met $\frac{1}{2}$ dm. steenkool by onderent	2	8 $\frac{1}{2}$	—	—	Sandstone, medium- to coarse-grained, whitish-grey, slightly felspathic, with $\frac{1}{2}$ in. coal at bottom.
Sandsteen, swart, fyngelaag.....		7 $\frac{1}{2}$	498	7	Sandstone, black, laminated.
Steenkool, hoofsaaklik matkool, minderwaardig veral in boonste 15 dm., piriethoudend	4	0	502	7	Coal, mainly dull, inferior especially in top 15 in., pyritic.
Sandsteen, fynkorrelrig, vuilwit..	1	4	503	11	Sandstone, fine-grained, dirty white.
Steenkool.....		5	—	—	Coal.
Sandsteen, donkervaal, vuilvaal, fyngelaag, fyn- tot grofkorrelrig	3	10	—	—	Sandstone, dark grey, dirty grey, laminated, fine- to coarse-grained.
Steenkool, skalieagtig.....		3	—	—	Coal, shaly.
Sandsteen; donkervaal tot donkerkleurige, mikahoudende lae en wit, middelkorrelrige tot grinterige, veldspatiese lae om die beurt; bevat enkele kwartspoelklippies tot $\frac{1}{4}$ dm. in diameter	4	0	—	—	Sandstone; alternating dark grey to dark-coloured, micaceous bands and white, medium-grained to gritty, felspathic bands; contains occasional quartz pebbles up to $\frac{1}{4}$ in. diameter.
Sandsteen, veldspaties, massief, wit, fynkorrelrig tot grinterig, met baie kwartspoelklippies tot $\frac{1}{4}$ dm. in diameter	19	7	532	0	Sandstone, felspathic, massive, white, fine-grained to gritty, with many quartz pebbles up to $\frac{1}{4}$ in. in diameter.

BOORGAT 101 : MC CABES VLEY 1371 : BOREHOLE 101

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recorded	Ware diepte True depth	Nature of strata
R 414 C	N.G..... Glanskool, gelaag, piriethou- dend, met 4 dm. skalie en en gelaagde glanskool by onderent	Dm. In. 15 25	Vt. Ft. 142 —	N.S. Coal, bright, banded, pyritic, with 4 in. shale and banded bright coal at bottom.
B	N.G..... Glanskool, gelaag, skaliagtig in onderste 1 dm. N.G..... Glanskool, gelaag, skaliagtig in onderste 3 dm.	68 12 6 15	— — — —	N.S. Coal, bright, banded, shaly in bottom 1 in. N.S. Coal, bright, banded, shaly in bottom 3 in.
A	N.G..... Glanskool, gelaag, piriethou- dend na bo en met dun skalielagies na onder	32 15	156 9	N.S. Coal, bright, banded, pyritic towards top and with thin shale bands towards bottom.
R 415 C	N.G..... Glanskool, gelaag, met enkele dun skalielagies naby onder- ent	62 17	161 11 —	N.S. Coal, bright, banded, with occasional thin shale bands near bottom.
B	N.G..... Glanskool, gelaag, met enkele dun skalielagies N.G..... Glanskool, gelaag, kalsiethou- dend in onderste 2 dm.	19 11½ 3½ 21	— — — 167 11	N.S. Coal, bright, banded, with occasional thin shale bands. N.S. Coal, bright, banded, calcitic in bottom 2 in.
A	N.G..... Glanskool, gelaag, met kalsiet- houdende skaliagtige, lagies in boonste 3½ dm.	129 17	— 180 1	N.S. Coal, bright, banded, with calcitic, shaly bands in top 3½ in.
R 416 C	N.G..... Glanskool, gelaag, met dun skalielagies na bo en minder- waardige, kalsiethoudende lae in onderste 9 dm., skali- agtig in onderste 1 dm. N.G.....	8½ 38 81	183 11 — —	N.S. Coal, bright, banded, with thin shale bands towards top and inferior, calcitic bands in bottom 9 in., shaly in bottom 1 in. N.S.
B	Glanskool, gelaag, skaliagtig in boonste en onderste 2 tot 3 dm., met 'n korrelrige, piriethoudende lagie van 'n halfduim 6 dm. van onder af N.G.....	36 24	— —	Coal, bright, banded, shaly in top and bottom 2 to 3 in., with a ½-in. granular, pyritic band 6 in. from bottom. N.S.
A	Glanskool, gelaag, met dun skalielagies in onderste 7 dm. Skalie..... Glanskool, gelaag, kalsiet- en piriethoudend Skalie..... Glanskool, gelaag, skaliagtig in onderste 3 dm., effens piriethoudend	26 1½ 11½ 2½ 32½	— — — — 205 0	Coal, bright, banded, with thin shale bands in bottom 7 in. Shale. Coal, bright, banded, calcitic and pyritic. Shale. Coal, bright, banded, shaly in bottom 3 in., slightly pyritic.

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkyr Thickness recorded	Ware diepte True depth		Nature of strata
			Dm. In.	Vt. Ft.	
R 417	N.G.....	93	212	9	N.S.
A	Glanskool, gelaag, met dun skalielagies	7	—	—	Coal, bright, banded, with thin shale bands.
	Skalie.....	1 $\frac{1}{2}$	—	—	Shale.
	Glanskool, gelaag.....	5 $\frac{1}{2}$	—	—	Coal, bright, banded.
	Skalie.....	2 $\frac{1}{2}$	—	—	Shale.
	Glanskool, gelaag, skalieagtig in boonste 6 dm.	21	215	10 $\frac{1}{2}$	Coal, bright, banded, shaly in top 6 in.
R 419	N.G.....	53	433	6	N.S.
C	Matkool, glansend, met enkele groot piriethoude	53	—	—	Coal, dull, lustrous, with occa- sional large pyrite nodules.
B	Matkool, glansend, met piriethou- houdende, skalieagtige lagies (1 $\frac{1}{2}$ dm., 3 dm., en 3 dm.) onderskeidelik 7 dm. van bo af, 12 dm. van onder af, en by onderent	50	—	—	Coal, dull, lustrous, with 1 $\frac{1}{2}$ in. 3-in., and 3-in. pyritic, shaly bands respectively 7 in. from top, 12 in. from bottom, and at bottom.
A	Steenkool, hoofsaaklik mat- kool, met wryfvlakke in onderste 12 dm., piriethou- dend	36	445	1	Coal, mainly dull, with slicken- sides in bottom, 12 in., pyritic.
R 420	N.G.....	10	456	1	N.S.
E	Matkool, meer glansend na onder	19 $\frac{1}{2}$	—	—	Coal, dull, brighter towards bottom
D	N.G.....	3 $\frac{1}{2}$	—	—	N.S.
	Steenkool, hoofsaaklik mat- kool, effens piriethoudend	24	—	—	Coal, mainly dull, slightly pyritic.
	Glanskool, erg kalsiethoudend	3	—	—	Coal, bright, very calcitic.
	Steenkool, gemeng, piriethou- dend en kalsiethoudend	10	—	—	Coal, mixed, pyritic and calcitic.
	Matkool, skalieagtig by bo-ent	7	—	—	Coal, dull, shaly at top.
C	Steenkool, gemeng, piriethou- dend en skalieagtig	4	—	—	Coal, mixed, pyritic and shaly.
	Glanskool, gelaag, piriethou- dend	13	—	—	Coal, bright, banded, pyritic.
	Matkool, piriethoudend	11 $\frac{1}{2}$	—	—	Coal, dull, pyritic.
B	Skalie, koolstofhoudend, piriethoudend	3	—	—	Shale, carbonaceous, pyritic.
	Steenkool ; matkool- en ge- mengde steenkoollae om die beurt	30 $\frac{1}{2}$	—	—	Coal, alternating bands of dull and mixed coal.
	Piriethoudende laag.....	1	—	—	Pyritic band.
A	Steenkool, gemeng, piriethou- dend	8	467	7	Coal, mixed, pyritic.
	N.G.....	372	498	7	N.S.
	Steenkool, hoofsaaklik mat- kool, minderwaardig veral in boonste 15 dm. piriethou- dend	48	502	7	Coal, mainly dull, inferior especially in top 15 in., pyritic.

BOORGAT 101 : MC CABES VLEY 1371 : BOREHOLE 101
ANALISE VAN LUGGEDROOGDE STEENKOOI

ANALYSIS OF AIR-DRIED COAL

No. van B.N.I.-monster F.R.I. sample No.	DIKTE (Dm.) THICKNESS (In.)		RU-STEENKOOI RAW COAL						WASTOETS WASHING TEST		DRYESTOF FLOAT						SINK- STOF SINK	
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. C.V. lb./lb.	H ₂ O %	As %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	Groot- te (Dm.) Size (In.)	S.G.	Op- brengs Yield %	V.W. C.V. lb./lb.	H ₂ O %	As %	V.B. V.M. %	V.K. F.C. %		Swel- syfer Swel- ling number
R 414	C	25	—	1·7	22·9	36·0	39·4	4	—	—	—	—	—	—	—	—	—	—
	68	—	—	2·1	26·3	32·0	39·6	2	—1	1·45	44·3	—	—	—	—	—	—	—
	38	27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
R 415	A	15	—	1·8	26·1	32·9	39·2	2½	—	—	—	—	—	—	—	—	—	—
	62	17	—	2·3	21·2	32·9	43·6	3	—	—	—	—	—	—	—	—	—	—
	19	32½	—	—	22·3	—	—	—	—1	1·45	59·4	—	2·5	16·8	34·5	46·2	3½	30·9
R 416	A	17	132½	—	2·4	18·0	33·4	46·2	2½	—	—	—	—	—	—	—	—	—
	46	38	—	—	20·2	—	—	—	—1	1·45	75·5	—	2·7	14·9	34·8	47·6	2½	37·1
	81	36	—	—	22·0	—	—	—	—1	1·45	68·5	—	2·7	15·6	33·9	47·8	2½	36·1
R 417	A	74	—	—	23·8	—	—	—	—1	1·45	68·3	—	3·3	13·5	33·3	49·9	3	46·2
	24	37½	—	—	32·4	—	—	—	—1	1·45	49·6	—	2·9	16·4	33·4	47·3	2	48·1
	93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
R 419	A	2,611½	—	—	—	—	—	—	—1	1·58	71·9	11·3	3·2	19·1	17·0	60·7	P	37·2
	—	53	—	—	24·2	—	—	—	—1	1·58	73·0	11·6	2·4	17·8	19·5	60·3	P	42·4
	—	50	—	—	24·4	—	—	—	—1	1·58	85·1	12·6	2·9	12·5	25·0	59·6	1½	45·7
R 420	A	36	—	—	17·4	—	—	—	—	—	—	—	—	—	—	—	—	—
	132	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	19½	—	—	—	24·5	—	—	—	—1	1·58	63·1	11·5	2·2	17·9	22·1	57·8	F	36·0
R 421	E	3½	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	37	—	—	19·1	—	—	—	—1	1·58	78·1	12·5	2·2	13·4	25·2	59·2	F	39·5
	—	35½	—	—	21·3	—	—	—	—1	1·58	76·6	12·2	2·2	15·2	26·1	56·5	1A _g	41·3
R 422	B	42½	—	—	17·5	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	372	48	—	—	29·6	—	—	P	—1	1·58	47·5	—	—	—	—	—	—	—

BOORGAT 102 : VERGULDE HELM 723 : BOREHOLE 102

Kern 3½ dm.

Core 3½ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Grond.....	5	0	—	—	Soil.
Moddersteen (stampboor).....	186	6	191	6	Mudstone (jump-drill).
Moddersteen, vaal en ligblou, onderste 24 dm. donkervaal tot swart en skalieagtig	116	6	308	0	Mudstone, grey and light blue bottom 24 in. dark grey to black and shaly.
Glanskool, gelaag, en skalie; erg piriethoudend	1	2	—	—	Coal, bright, banded, and shaly, very pyritic.
Skalie, kleierig, boonste helfte swart en onderste helfte donker- vaal	5	8	—	—	Shale, clayey, top half black and bottom half dark grey.
Glanskool, gelaag, skalieagtig in onderste helfte en middel, kalsiethoudend	2	5	—	—	Coal, bright, banded, shaly in bottom half and middle, calcitic
Skalie, donkervaal.....	2	10	—	—	Shale, dark grey.
Glanskool, gelaag, skalieagtig in boonste en onderste 3 dm.	1	6	—	—	Coal, bright, banded, shaly in top and bottom 3 in.
Skalielae, breed, en breë lae tussen- gelaagde skalie en steenkool met enkele glanskoollae	6	5	—	—	Shale bands, broad, and broad bands of interbedded shale and coal with some bright coal bands.
Glanskool, gelaag, skalieagtig in onderste 2 dm., piriethoudend	1	0	—	—	Coal, bright, banded, shaly in bottom 2 in., pyritic.
Skalie met dun steenkoollagies...		8	329	8	Shale with thin coal-bands.
Glanskool, gelaag, skalieagtig in onderste 1½ dm., piriethoudend	1	1	—	—	Coal, bright, banded, shaly in bottom 1½ in., pyritic.
Skalie.....		5½	—	—	Shale.
Glanskool, gelaag, piriethoudend.		11	—	—	Coal, bright, banded, pyritic.
Skalie.....		6	—	—	Shale.
Glanskool, gelaag, erg piriethou- dend in onderste 12 dm.	3	5½	336	1	Coal, bright, banded, very pyritic in bottom 12 in.
Skalie, swart en donkervaal.....	4	6	—	—	Shale, black and dark grey.
Skalie tussengelaag met steenkool, kalsiet- en piriethoudend	3	0	—	—	Shale interbedded with coal, calcitic and pyritic.
Skalie.....		10	—	—	Shale.
Glanskool, gelaag.....	1	0	—	—	Coal, bright, banded.
Skalie, swart, met 3 dm. steenkool in middel	3	1	348	6	Shale, black, with 3 in. coal in middle.
Glanskool, gelaag, skalieagtig in boonste 4 dm., piriethoudend	4	1	—	—	Coal, bright, banded, shaly in top 4 in., pyritic.
Skalie, swart en donkervaal.....	1	6	354	2	Shale, black and dark grey.
Skalie tussengelaag met steenkool, piriethoudend	1	6	—	—	Shale interbedded with coal, pyritic.
Glanskool, gelaag, plek-plek skalie- agtig, piriethoudend	2	8½	—	—	Coal, bright, banded, shaly in parts, pyritic.
Glanskool, gelaag, kalsiethoudend, met 1 dm. skalie 25 dm. van onder af en 'n skalieagtige laag (7 dm.) 13 dm. van onder af	4	2½	—	—	Coal, bright, banded, calcitic, with 1 in. shale 25 in. from bottom and a 7-in. shaly band 13 in. from bottom.
Skalie.....		4	—	—	Shale.
Glanskool, gelaag, plek-plek pik- agtig, met 1½ dm. skalie 31 dm. van onder af en 1 dm. skalie 39 dm. van onder af	4	10	368	0	Coal, bright, banded, pitchlike in parts, with 1½ in. shale 31 in. from bottom and 1 in. shale 39 in. from bottom.
Skalie, swart.....	4	5	372	5	Shale, black.
Glanskool, gelaag.....	1	4½	—	—	Coal, bright, banded.
Skalie.....		4½	—	—	Shale.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Glanskool, gelaag, skalieagtig in onderste 2 dm.; 3 dm. kalsiet- en piriethoudende, gemengde steenkool 25 dm. van onder af; wryfvlak naby bo-ent	3	3½	—	—	Coal, bright, banded, shaly in bottom 2 in.; 3 in. calcitic and pyritic, mixed coal 25 in. from bottom; slickenside near top.
Skalie.....		4½	—	—	Shale.
Glanskool, gelaag, plek-plek pik- agtig, effens piriethoudend; ½ dm. skalie 2 dm. van bo af, 3 dm. gemengde steenkool en kalsiet 16 dm. van bo af, en 'n paar dun skalielagies naby onderent	3	8	—	—	Coal, bright, banded, pitchlike in parts, slightly pyritic; ½ in. shale 2 in. from top, 3 in. mixed coal and calcite 16 in. from top, and a few thin shale bands near bottom.
Skalie met 'n paar steenkool- aartjies		9	—	—	Shale with a few coal-stringers.
Glanskool, gelaag, piriët- en kal- siethoudend, skalieagtig in boonste paar duim, effens sideriethoudend na onder	3	11	—	—	Coal, bright, banded, pyritic and calcitic, shaly in top few inches, slightly sideritic towards bottom.
Steenkool en sideriet.....	1	0	387	4	Coal and siderite.
Skalie, vaalswart in boonste helfte en swart in onderste helfte, met vier dun steenkoolagies	13	5	—	—	Shale, greyish-black in top half and black in bottom half, with four thin coal-bands.
Skalie tussengelaag met steenkool	3	0	—	—	Shale interbedded with coal.
Skalie.....		6	—	—	Shale.
Skalie tussengelaag met steenkool	2	2	—	—	Shale interbedded with coal.
Skalie met 'n bietjie steenkool...	1	6	—	—	Shale with a little coal.
Skalie tussengelaag met steenkool, erg piriethoudend	2	11	—	—	Shale interbedded with coal, very pyritic.
Skalie.....		3	—	—	Shale.
Glanskool, gelaag, plek-plek skalie- agtig	1	0½	—	—	Coal, bright, banded, shaly in places.
Skalie.....		11	—	—	Shale.
Skalie tussengelaag met steenkool, piriethoudend	3	9	—	—	Shale interbedded with coal, pyritic.
Skalie, koolstofhoudend.....	1	2	—	—	Shale, carbonaceous.
Skalie tussengelaag met steenkool en 'n bietjie gelaagde glanskool, effens piriethoudend (12 dm. verloor)	5	0	—	—	Shale interbedded with coal and a little banded bright coal, slightly pyritic (12 in. lost).
Skalie met twee dun steenkoolagies	1	7	—	—	Shale with two thin coal-bands.
Skalie en steenkool, gemeng, met 'n wryfvlak by onderent	1	11	427	7	Shale and coal, mixed, with a slickenside at bottom.
Glanskool, gelaag, effens sideriet- houdend, met 'n paar dun skalielagies en 4 dm. skalie met 'n wryfvlak in middel	2	3	430	1	Coal, bright, banded, slightly sideritic, with a few thin shale bands and 4 in. shale with a slickenside in middle.
Skalie, swart, met tien glanskool- lagies (1 tot 4 dm.)	11	5	—	—	Shale, black, with ten 1-in. to 4-in. bright coal-bands.
Glanskool, gelaag, met 'n paar dun skalielagies		11	—	—	Coal, bright, banded, with a few thin shale bands.
Skalie.....	1	1	—	—	Shale.
Glanskool, gelaag, met 'n paar dun skalielagies	1	1	—	—	Coal, bright, banded, with a few thin shale bands.
Skalie, koolstofhoudend, met ses steenkoolagies (1 tot 5 dm.)	4	8	—	—	Shale, carbonaceous, with six 1-in. to 5-in. coal-bands.
Glanskool, gelaag, met 'n paar dun skalielagies	1	10	—	—	Coal, bright, banded, with a few thin shale bands.
Skalie, swart, met 'n paar steen- koolagies	2	11	—	—	Shale, black, with a few coal- bands.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Glanskool, gelaag.....	1	1	—	—	Coal, bright, banded.
Skalie en steenkool gemeng met kalsiet	1	11	—	—	Shale and coal mixed with calcite.
Skalie en steenkool.....	—	11	—	—	Shale and coal.
Glanskool, gelaag, plek-plek skalieagtig, erg piriethoudend, erg sideriethoudend veral in onderste helfte; wryfvlak naby middel	2	6	460	7	Coal, bright, banded, shaly in places, very pyritic, very sideritic especially in bottom half: slickenside near middle.
Skalie, swart, met elf steenkool-lagies (1 tot 6 dm.)	12	0	—	—	Shale, black, with eleven 1-in. to 6-in. coal-bands.
Glanskool, gelaag, skalieagtig, sideriet- en piriethoudend	1	7	—	—	Coal, bright, banded, shaly, sideritic and pyritic.
Skalie met dun steenkoolagies...	4	1	—	—	Shale with thin coal-bands.
Glanskool, gelaag, piriethoudend.	—	11	479	2	Coal, bright, banded, pyritic.
Skalie met dun steenkoolagies...	4	11	—	—	Shale with thin coal-bands.
Glanskool, gelaag.....	1	2	—	—	Coal, bright, banded.
Skalie met 'n paar dun steenkool-lagies	8	0	—	—	Shale with a few thin coal-bands.
Skalie tussengelaag met steenkool	3	10	—	—	Shale interbedded with coal.
Skalie met vier steenkoolagies (1 tot 4 dm.)	4	5	—	—	Shale with four 1-in to 4-in. coal-bands.
Skalie en gelaagde glanskool....	1	2	—	—	Shale and banded bright coal.
Skalie, swart, en koolstofhoudende skalie met twee-en-twintig lagies (1 tot 8 dm.) steenkool en skalieagtige steenkool	30	10	—	—	Shale, black, and carbonaceous shale with twenty-two 1-in. to 8-in. coal and shaly coal-bands.
Steenkool, verkrummel, met wryfvlakke in alle rigtings	—	11	—	—	Coal, crumbled, with slickensides in all directions.
Skalie, swart, en koolstofhoudende skalie met ses dun steenkool-lagies	12	3	547	0	Shale, black, and carbonaceous shale with six thin coal-bands.
Matkool, skalieagtig, met 'n bietjie glanskool en 'n paar skalielae, piriethoudend	6	0	553	3	Coal, dull, shaly, with a little bright coal and a few shale bands, pyritic.
Skalie, swart, en koolstofhoudende skalie met 'n bietjie steenkoolagtige skalie en glanskool	17	10	—	—	Shale, black, and carbonaceous shale with a little coaly shale and bright coal.
Skalie, vaal.....	1	0	—	—	Shale, grey.
Skalie, swart, met talryke wryfvlakke in alle rigtings	3	2	—	—	Shale, black, with numerous slickensides in all directions.
Skalie, koolstofhoudend, en steenkoolagtige skalie	3	8	—	—	Shale, carbonaceous, and coaly shale.
Skalie, koolstofhoudend, steenkoolagtige skalie en skalieagtige steenkool, gemeng	5	8	—	—	Shale, carbonaceous, coaly shale and shaly coal, mixed.
Skalie, koolstofhoudend, met 'n wryfvlak naby onderent	4	8	—	—	Shale, carbonaceous, with a slickenside near bottom.
Skalie, swart, met twee steenkoolagtige lae in middel en by onderent	11	4	600	7	Shale, black, with two coaly bands in middle and at bottom.
Matkool, plek-plek met 'n kubiese breuk, plek-plek swaar, piriethoudend	2	6	—	—	Coal, dull, with a cubic fracture in parts, heavy in parts, pyritic and calcitic.
Skalie, steenkoolagtig.....	—	9	—	—	Shale, coaly.
Matkool, glansend, met 'n piriethoudende laag van 'n halfduim by onderent	—	11	—	—	Coal, dull, lustrous, with a $\frac{1}{2}$ -in. pyritic band at bottom.
Matkool, korrelrig, swaar, piriethoudend	—	6	—	—	Coal, dull, granular, heavy, pyritic.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Matkool, piriethoudend, met twee skalielae van 1 dm. en 2 dm. in middel	4	10	—	—	Coal, dull, pyritic, with two shale bands of 1 in. and 2 in. in middle.
Steenkool; hoofsaaklik glansende matkool; piriethoudend, met 'n bietjie gemengde steenkool	5	1	—	—	Coal; mainly lustrous dull coal; pyritic, with a little mixed coal.
Skalie, steenkoolagtig.....	—	3	—	—	Shale, coaly.
Steenkool; lae van hoofsaaklik mat- en hoofsaaklik glanskool om die beurt, eersgenoemde oorwegend; piriethoudend	4	0	619	5	Coal; alternating bands of mainly dull and mainly bright coal, former predominating; pyritic.
Sandsteen, baie fynkorrelrig, fyn- gelaag, effens kruisgelaag, mika- houdend, ligbruin en swart, onderste 18 dm. swart en skalie- agtig	15	11	—	—	Sandstone, very fine-grained, lami- nated, slightly crossbedded, micaceous, light brown and black, bottom 18 in. black and shaly.
Sandsteen en steenkool, gemeng..	6	—	635	10	Sandstone and coal, mixed.
Steenkool, gemeng; hoofsaaklik glanskool	10	—	—	—	Coal, mixed; mainly bright coal.
Matkool, met 'n bietjie glanskool na onder	4	0	—	—	Coal, dull, with a little bright coal towards bottom.
Steenkool, gemeng; hoofsaaklik matkool; kalsiethoudend in boonste 4 dm. en met 'n lagie ($\frac{1}{2}$ dm.) piriet by onderent	1	$3\frac{1}{2}$	—	—	Coal, mixed, mainly dull, calcitic in top 4 in. and with a $\frac{1}{2}$ -in. pyrite band at bottom.
Matkool met 'n bietjie glanskool, meer glansend by bo- en onder- ent, piriethoudend	6	1	648	2	Coal, dull, with a little bright coal, brighter at top and bottom, pyritic.
Sandsteen, baie fynkorrelrig, fyn- gelaag, effens kruisgelaag, mika- houdend, ligbruin en swart	16	5	—	—	Sandstone, very fine-grained, lami- nated, slightly crossbedded, micaceous, light brown and black.
Sandsteen; dun, golwende, donker- vaal lagies en vuilwit lagies om die beurt	1	10	—	—	Sandstone; alternating fine, wavy bands of dark grey and dirty white sandstone.
Sandsteen, middelkorrelrig tot grinterig, wit, veldspaties	2	8	—	—	Sandstone, medium-grained to gritty, white, feldspathic.
Sandsteen; fynkorrelrige, donker- vaal tot swart, golwende lagies en fyn- tot middelkorrelrige, veldspaties, wit tot vuilwit, golwende lagies om die beurt	10	9	679	10	Sandstone; alternating fine- grained, dark grey to black, wavy bands and fine- to medium - grained, feldspathic, white to dirty white, wavy bands.

BOORGAT 102 : VERGULDE HELM 723 : BOREHOLE 102

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recorded	Ware diepte True depth		Nature of strata
R 475	N.G.....	Dm. In. 8	Vt. Ft. 329	Dm. In. 8	N.S.
B	Glanskool, gelaag, skalieagtig in onderste 1½ dm., piriethou- dend	13	—	—	Coal, bright, banded, shaly in bottom 1½ in., pyritic.
	N.G.....	5½	—	—	N.S.
	Glanskool, gelaag, piriethou- dend	11	—	—	Coal, bright, banded, pyritic.
A	N.G.....	6	—	—	N.S.
	Glanskool, gelaag, erg piriethou- dend in onderste 12 dm.	41½	336	1	Coal, bright, banded, very pyritic in bottom 12 in.
R 476	N.G.....	37	348	6	N.S.
D	Glanskool, gelaag, skalieagtig in boonste 4 dm., piriethou- dend (1 dm. kern verloor)	49	—	—	Coal, bright, banded, shaly in top 4 in., pyritic (1 in. core lost).
C	N.G.....	36	—	—	N.S.
	Glanskool, gelaag, plek-plek skalieagtig, piriethoudend	32½	—	—	Coal, bright, banded, shaly in parts, pyritic.
B	Glanskool, gelaag, kalsiethou- dend, met 1 dm. skalie 25 dm. van onder af en 'n skalieagtige laag (7 dm.) 13 dm. van onder af	50½	—	—	Coal, bright, banded, calcitic, with 1 in. shale 25 in. from bottom and a 7-in. shaly band 13 in. from bottom.
A	N.G.....	4	—	—	N.S.
	Glanskool, gelaag, plek-plek pikagtig, met 1½ dm. skalie 31 dm. van onder af en 1 dm. skalie 39 dm. van onder af (3 dm. kernverlies tussen 354 vt. 2 dm. en 368 vt.)	58	368	0	Coal, bright, banded, pitch- like in parts, with 1½ in. shale 31 in. from bottom and 1 in. shale 39 in. from bottom (3 in. core lost between 354 ft. 2 in. and 368 ft.).
R 477	N. G.....	53	372	5	N.S.
D	Glanskool, gelaag.....	16½	—	—	Coal, bright, banded.
	N.G.....	4½	—	—	N.S.
C	Glanskool, gelaag, skalieagtig in onderste 2 dm., met 3 dm. kalsiet- en piriethoudende, gemengde steenkool 25 dm. van onder af; wryfvlak naby bo-ent	39½	—	—	Coal, bright, banded, shaly in bottom 2 in., with 3 in. calcitic and pyritic, mixed coal 25 in. from bottom; slickenside near top.
B	N.G.....	4½	—	—	N.S.
	Glanskool, gelaag, plek-plek pikagtig, effens piriethou- dend, met ½ dm. skalie 2 dm. van bo af, 3 dm. ge- mengde steenkool en kalsiet 16 dm. van bo af, en 'n paar dun skalielagies naby onderent	44	—	—	Coal, bright, banded, pitch- like in parts, slightly pyritic, with ½ in. shale 2 in. from top, 3 in. mixed coal and calcite 16 in. from top, and a few thin shale bands near bottom.
A	N.G.....	9	—	—	N.S.
	Glanskool, gelaag, piriethou- dend, skalieagtig boonste paar duim en effens sideriethoudend na onder	47	—	—	Coal, bright, banded, pyritic and calcitic, shaly in top few inches and slightly sideritic towards bottom.
	N.G.....	12	387	4	N.S.
	(2 dm. kern verloor tussen 372 vt. 5 dm. en 387 vt. 4 dm.)				(2 in. core lost between 372 ft. 5 in. and 387 ft. 4 in.).

Bg. 102 (verv.)

B.H. 102 (contd.)

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recorded	Ware diepte True depth	Nature of strata
R 478 A	N.G..... Glanskool, gelaag, effens side- riethoudend; 'n paar dun steenkoollagies en 4 dm. skalie met 'n wryfvlak in middel uitgesluit	Dm. In. 23 27	Vt. Dm. Ft. In. 427 7 430 1	N.S. Coal, bright, banded, slightly sideritic; a few thin coal- bands and 4 in. shale with a slickenside in middle exclu- ded.
R 479 D	N.G..... Matkool, plek-plek met 'n kubiese breuk, plek-plek swaar, piriët- en kalsiet- houdend	136 30	600 7 —	N.S. Coal, dull, with a cubic fracture in parts, heavy in parts, pyritic and calcitic.
C	N.G..... Matkool, piriethoudend, met twee skalielae van 1 dm. en 2 dm. in middel	26 58	— —	N.S. Coal, dull, pyritic, with two shale bands of 1 in. and 2 in. in middle.
B	Steenkool; hoofsaaklik glans- sende matkool; piriethou- dend, met 'n bietjie gemeng- de steenkool	61	—	Coal; mainly lustrous dull coal; pyritic, with a little mixed coal.
A	N.G..... Steenkool; lae van hoofsaaklik mat- en hoofsaaklik glans- kool om die beurt, eersge- noemde oorwegend; piriët- houdend	3 48	— 619 5	N.S. Coal; alternating bands of mainly dull and mainly bright coal, former predo- minating; pyritic.
R 480	N.G.....	6	635 10	N.S.
B	Steenkool, gemeng; hoofsaak- lik glanskool	10	—	Coal, mixed; mainly bright.
	Matkool met 'n bietjie glans- kool na onder	48	—	Coal; dull, with a little bright coal towards bottom.
	Steenkool, gemeng; hoofsaak- lik matkool; kalsiethoudend in boonste 4 dm. en met 'n piriëtlagie ($\frac{1}{2}$ dm.) by onderent	15½	—	Coal, mixed; mainly dull, calcitic in top 4 in. and with a $\frac{1}{2}$ -in. pyrite band at bottom.
A	Matkool met 'n bietjie glans- kool, meer glansend by bo- en onderent, piriethoudend (1½ dm. kern verloor tussen 635 vt. 10 dm. en 648 vt. 2 dm.)	73	648 2	Coal, dull, with a little bright coal, brighter at top and bottom, pyritic (1½ in. core lost between 635 ft. 10 in. and 648 ft. 2 in.).

BOORGAT 102 :: VERGULDE HELM 723 :: BOREHOLE 102

ANALISE VAN LUGGEDROOGDE STEENKOOI

ANALYSIS OF AIR-DRIED COAL

No. van B.N.I.-monster F.R.I. sample no.	DIKTE (DM.) THICKNESS (IN.)		RU-STEENKOOI RAW COAL						WASTOETS WASHING TEST		DRYSTOF FLOAT						SINK- STOF SINK																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. C.V. lb./lb.	H ₂ O %	As		V.B. V.M. %	V.K. F.C. %	Swel- lyer Swel- ling number	Groot- te (Dm.) Size (in.)	S.G.	Op- brengs Yield %	V.W. C.V. lb./lb.	H ₂ O		As		V.B. V.M. %	V.K. F.C. %	Swel- lyer Swel- ling number	As	Ash	%																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																

BOORGAT 103 : VAN DER WALSPAN 1383 : BOREHOLE 103

Kern 3½ dm.

Core 3½ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
grond.....	10	0	—	—	Soil.
ateriet.....	20	0	30	0	Laterite.
Moddersteen, vaal en ligvaalblou; onderste 9 dm. swart en skalie- agtig.	148	10	178	10	Mudstone, grey and light greyish- blue; bottom 9 in. black and shaly.
skalie, swart, en vaal moddersteen	7	0	—	—	Shale, black, and grey mudstone.
skalie tussengelaag met steenkool	1	2	—	—	Shale interbedded with coal.
skalie, swart.....	—	6	—	—	Shale, black.
lanskool, gelaag, skalieagtig by bo- en onderent	1	2	—	—	Coal, bright, banded, shaly at top and bottom.
skalie, donkeryaal.....	3	2	—	—	Shale, dark grey.
kalielae, breed, en breë steenkool- lae om die beurt	4	8	196	6	Shale bands, broad, alternating with broad coal-bands.
lanskool, gelaag, skalieagtig in onderste 3 dm.; boonste 3 dm. verweer	1	11	—	—	Coal, bright, banded, shaly in bottom 3 in.; top 3 in. weathered.
kalielae, breed, en breë steenkool- lae om die beurt	3	11	—	—	Shale bands, broad, alternating with broad coal-bands.
skalie, swart, en koolstofhoudende skalie	4	4	—	—	Shale, black, and carbonaceous shale.
kalielae, breed, en breë lae skalie tussengelaag met steenkool om die beurt	5	9	—	—	Shale bands, broad, alternating with broad bands of interbedded shale and coal.
skalie met twee steenkoollagies (4 dm. en 6 dm.)	3	6	—	—	Shale with a 4-in. and a 6-in. coal band.
skalie tussengelaag met steenkool	3	3	219	2	Shale interbedded with coal.
lanskool, gelaag.....	2	11	—	—	Coal, bright, banded.
skalie.....	—	11	—	—	Shale.
skalie tussengelaag met steenkool	2	1	—	—	Shale interbedded with coal.
skalie met steenkoolstrepies.....	—	9	—	—	Shale with coal-streaks.
lanskool, gelaag, met dun skalie- lagies veral in onderste helfte, effens piriethoudend, met 'n kalsiet- en piriethoudende lagie van 2½ dm. by onderent	2	5	—	—	Coal, bright, banded, with thin shale bands especially in bottom half, slightly pyritic, with a 2½-in. calcitic and pyritic band at bottom.
lanskool, gelaag, met 'n paar dun skalielagies	2	6	—	—	Coal, bright, banded, with a few thin shale bands.
skalie tussengelaag met steenkool	2	0	—	—	Shale interbedded with coal.
lanskool, gelaag, met 'n paar dun skalielagies in onderste helfte	1	9½	—	—	Coal, bright, banded, with a few thin shale bands in bottom half.
skalie.....	—	2½	—	—	Shale.
lanskool, gelaag, pikagtig.....	1	1	—	—	Coal, bright, banded, pitch-like.
skalie.....	—	2	—	—	Shale.
lanskool, gelaag.....	1	4	237	6	Coal, bright, banded.
skalie, swart.....	3	10	—	—	Shale, black.
skalie tussengelaag met steenkool	3	4	—	—	Shale interbedded with coal.
skalie, vaalswart.....	4	6	—	—	Shale, greyish-black.
lanskool, gelaag.....	—	11	—	—	Coal, bright, banded.
skalie, swart, en koolstofhoudende skalie met twee steenkoollagies van 2 dm.	2	11	253	0	Shale, black, and carbonaceous shale with two 2-in. coal-bands.
lanskool, gelaag, piriethoudend, sideriethoudend in onderste 10 dm.	2	1	—	—	Coal, bright, banded, pyritic, sideritic in bottom 10 in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Skalie, swart, en koolstofhoudende skalie met twee sideriethoudende, skalieagtige steenkool-lagies (4 dm. en 9 dm.) naby bo-ent, 27 dm. tussengelaagde skalie en steenkool naby onderent, en 17 dm. erg sideriet- en piriethoudende glanskool 7 vt. van onder af	15	10	270	11	Shale, black, and carbonaceous shale with a 4-in. and a 9-in. sideritic, shaly coal-band near top, 27 in. interbedded shale and coal near bottom, and 17 in. very sideritic and pyritic bright coal 7 ft. from bottom.
Glanskool, gelaag piriethoudend en effens sideriethoudend; boonste 3½ dm. fyngelaagde glanskool en skalie, onderste 2½ dm. skalie-agtig	1	11	272	10	Coal, bright, banded, pyritic and slightly sideritic; top 3½ in. laminated bright coal and shale, bottom 2½ in. shaly.
Skalie, swart, met talryke platgedrukte, ligkleurige skalie-insluitels met horisontale verlenging, sommige tot 1 dm.	3	6	—	—	Shale, black, with numerous flattened, light-coloured shale inclusions with horizontal elongation, some up to 1 in.
Glanskool, sideriethoudend, erg skalieagtig	1	9	—	—	Coal, bright, sideritic, very shaly.
Skalie, swart, met 'n paar steenkool-lagies	3	5	—	—	Shale, black, with a few coal-bands.
Skalie tussengelaag met steenkool, sideriethoudend	1	2	—	—	Shale interbedded with coal, sideritic.
Skalie, swart	1	6	—	—	Shale, black.
Skalie tussengelaag met steenkool	12	0	—	—	Shale interbedded with coal.
Skalielae met tussengelaagde skalie- en steenkool-lae om die beurt	8	1	—	—	Shale bands alternating with interbedded shale and coal-bands.
Skalie, swart, met nege steenkool-lagies (1 tot 4 dm.)	5	9	—	—	Shale, black, with nine 1-in. to 4-in coal-bands.
Skalie tussengelaag met steenkool	1	0	—	—	Shale interbedded with coal.
Skalie	7	—	—	—	Shale.
Skalie en steenkool tussengelaag met 'n paar skalielagies, erg sideriethoudend	3	0	—	—	Shale and coal interbedded with a few shale bands, very sideritic.
Skalie, swart, met ses sideriethoudende steenkool-lagies (1 tot 6 dm.)	7	10	322	5	Shale, black, with six 1-in. to 6-in. sideritic coal-bands.
Glanskool, gelaag, met twee skalie-lagies van 'n halfduim	1	10	—	—	Coal, bright, banded, with two ½-in. shale bands.
Skalie- en steenkool-lae om die beurt	3	6	—	—	Shale bands alternating with coal bands.
Skalie met talryke dun steenkool-lagies	2	5	—	—	Shale with many thin coal-bands.
Glanskool, gelaag, sideriethoudend in onderste 8 dm.	2	1	—	—	Coal, bright, banded, sideritic in bottom 8 in.
Glanskool, gelaag, erg sideriethoudend	1	2	333	5	Coal, bright, banded, very sideritic.
Skalie, swart, en koolstofhoudende skalie met tien steenkool-lagies (1 tot 5 dm.)	16	2	—	—	Shale, black, and carbonaceous shale with ten 1-in. to 5-in. coal-bands.
Steenkool, skalieagtig, sideriethoudend	1	8	—	—	Coal, shaly, sideritic.
Skalie, swart, en koolstofhoudende skalie met agt dun lagies gemengde steenkool en skalie in onderste helfte	17	9	369	0	Shale, black, and carbonaceous shale with eight thin mixed coal and shale bands in bottom half.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Skalielae, breed, en breë, gelaagde glanskoollae om die beurt, piriethoudend; wryfvlak by onderent	3	9	372	9	Shale bands, broad, alternating with broad, banded bright coal-bands, pyritic slickenside at bottom.
Glanskool, gelaag, met 1 dm. skalie in middel	1	8	—	—	Coal, bright, banded with 1 in. shale in middle.
Skalie en steenkool.....	30	2½	374	9	Shale and coal.
Skalie, swart, en koolstofhoudende skalie met veertien lae (1 tot 5 dm.) steenkool en skalieagtige steenkool, sommige sideriethoudend	—	9	—	—	Shale, black, and carbonaceous shale with fourteen 1-in. to 5-in. bands of coal and shaly coal, some sideritic.
Sandsteen, baie fynkorrelrig, swart, fyngelaag, met talryke fyn fusiet-lense; onduidelike fossiele kom voor	2	2	—	—	Sandstone, very fine-grained, black, laminated, with many fine fusain lenses; indistinct fossils appear.
Sandsteen, fyn- tot middelkorrelrig, swart en vuilvaal, met 'n paar swart, skalieagtige golwendelagies	4	4	—	—	Sandstone, fine- to medium-grained, black and dirty grey, with a few black, shaly, wavy layers.
Skalie, swart, en koolstofhoudende skalie met twee dun, skalieagtige steenkoollagies, 1 vt. ligbruin kleiskalie 2 vt. van onder af, en 6 dm. sanderige skalie 9 dm. van onder af	8	1	—	—	Shale, black, and carbonaceous shale with two thin, shaly coal-bands, 1 ft. light brown clay-shale 2 ft. from bottom, and 6 in. sandy shale 9 in. from bottom.
Sandsteen, fynkorrelrig, swart tot vuilvaal, golwend gelaag na onder	2	7	422	8	Sandstone, fine-grained, black to dirty grey, with a wavy banding towards bottom.
Skalie, koolstofhoudend; gelaagde glanskool en sideriet	2	6	—	—	Shale, carbonaceous; banded bright coal and siderite.
Matkool, skalieagtig.....	2	4	—	—	Coal, dull, shaly.
Skalie, bruin, en swart skalie....	1	0	—	—	Shale, brown, and black shale.
Skalie, ligbruin, kleierig, met onherkenbare fossiele in onderste 6 dm.	1	10	—	—	Shale, light brown, clayey, with unrecognisable fossils in bottom 6 in.
Sandsteen, wit, veldspaties, massief, fyn- tot grofkorrelrig; boonste 2 vt. effens fyngelaag	25	11	—	—	Sandstone, white, feldspathic, massive, fine- to coarse-grained; top 2 ft. slightly laminated.
Skalie, kleierig, bruin tot swart, met talryke onduidelike fossiele	1	0	—	—	Shale, clayey, brown to black, with many indistinct fossils.
Skalie- en steenkoollagies.....	1	2	—	—	Shale and coal-bands.
Skalie, kleierig, ligbruin.....	1	8	—	—	Shale, clayey, light brown.
Skalie, swart, en koolstofhoudende skalie	5	6	—	—	Shale, black, and carbonaceous shale.
Skalie, kleierig, swart-bruin.....	3	8	—	—	Shale, clayey, blackish-brown.
Sandsteen.....	—	4	469	7	Sandstone.

BOORGAT 103 : VAN DER WALTSPAN 1383 : BOREHOLE 103

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
			Vt. Ft.	Dm. In.	
R 471	N.G.....	Dm. In. 56	196	6	N.S.
F	Glanskool, gelaag, skalieagtig in onderste 3 dm.; boonste 3 dm. verweer	23	—	—	Coal, bright, banded, shaly in bottom 3 in.; top 3 in. weathered.
E	N.G.....	249	219	2	N.S.
	Glanskool, gelaag.....	35	—	—	Coal, bright, banded.
D	N.G.....	45	—	—	N.S.
	Glanskool, gelaag, met dun skalielagies veral in onder- ste helfte, effens piriethou- dend, met 'n kalsiet- en piriethoudende lagie van 2½ dm. by onderent	29	—	—	Coal, bright, banded, with thin shale bands especially in bottom half, slightly pyritic, with a 2½-in. calcitic and pyritic band at bottom.
C	Glanskool, gelaag, met 'n paar dun skalielagies	30	—	—	Coal, bright, banded, with a few thin shale bands.
B	N.G.....	24	—	—	N.S.
	Glanskool, gelaag, met 'n paar dun skalielagies in onderste helfte	21½	—	—	Coal, bright, banded, with a few thin shale bands in bottom half.
A	N.G.....	2½	—	—	N.S.
	Glanskool, gelaag, pikagtig..	13	—	—	Coal, bright, banded, pitch- like.
	N.G.....	2	—	—	N.S.
	Glanskool, gelaag (2 dm. kern verloor tussen 219 vt. 2 dm. en 237 vt. 6 dm.)	16	237	6	Coal, bright, banded (2 in. core lost between 219 ft. 2 in. and 237 ft. 6 in.).
R 472	N.G.....	35	253	0	N.S.
B	Glanskool, gelaag, piriethou- dend, sideriethoudend in onderste 10 dm.	25	—	—	Coal, bright, banded, pyritic, sideritic in bottom 10 in.
A	N.G.....	190	—	—	N.S.
	Glanskool, gelaag, piriethou- dend en effens sideriethou- dend; boonste 3½ dm. fyn- gelaagde glanskool en skalie, onderste 2½ dm. skalieagtig	23	272	10	Coal, bright, banded, pyritic and slightly sideritic; top 3½ in. laminated bright coal and shale, bottom 2½ in. shaly.
R 473	N.G.....	94	322	5	N.S.
C	Glanskool, gelaag, met twee skalielagies van 'n halfdm	22	—	—	Coal, bright, banded, with two ½-in. shale bands.
B	N.G.....	71	—	—	N.S.
	Glanskool, gelaag, sideriet- houdend in onderste 8 dm.	25	—	—	Coal, bright, banded, sideritic in bottom 8 in.
A	Glanskool, gelaag, erg side- riethoudend	14	333	5	Coal, bright, banded, very sideritic.
R 474	N.G.....	45	372	9	N.S.
	Glanskool, gelaag, met 1 dm. skalie in middel	20	—	—	Coal, bright, banded, with 1 in. shale in middle.
	N.G.....	2½	374	9	N.S.
	(1½ dm. kern verloor tussen 372 vt. 9 dm. en 374 vt. 9 dm.)				(1½ in. core lost between 372 ft. 9 in. and 374 ft. 9 in.).

BOORGAT 103 : VAN DER WALSPAN 1383 : BOREHOLE 103
ANALISE VAN LUGGEDROOGDE STEENKOOI

ANALYSIS OF AIR-DRIED COAL

No. van B.N.I.-monster F.R.I. sample no.	Dikte (Dm.) THICKNESS (IN.)		RU-STEENKOOI RAW COAL						WASTOETS WASHING TEST		DRYSTOF FLOAT						SINK- STOP SINK		
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. C.V.	H ₂ O %	As Ash %	V.B. V.M.	V.K. F.C.	Swel- syfer Swel- ling number	Groot- te (Dm.) Size (in.)	S.G.	Op- brengs Yield %	V.W. C.V.	H ₂ O %	As Ash %	V.B. V.M.	V.K. F.C.	Swel- syfer Swel- ling number	As Ash %	
R 471	—	23	—	3.0	26.0	31.0	38.0	1½	—	—	—	—	—	—	—	—	—	—	—
	249	35	—	—	17.0	—	—	—	—1	1.45	85.1	—	3.4	14.6	34.1	47.9	3½	—	31.6
	45	29	—	—	28.8	—	—	—	—1	1.45	36.7	—	—	—	—	—	—	—	—
	—	30	—	—	19.2	—	—	—	—1	1.45	61.5	—	3.5	13.4	33.5	49.6	3	—	30.1
	24	21½	—	—	22.0	—	—	—	—1	1.45	65.2	—	2.7	13.0	34.8	49.5	3	—	33.0
R 472	—	29	—	—	13.0	—	—	—	—1	1.45	93.0	—	3.3	11.8	33.8	51.1	2½	—	28.4
	188	25	—	—	18.2	—	—	—	—1	1.45	72.8	—	3.0	13.0	34.3	49.7	3	—	32.1
	190	23	—	—	27.5	—	—	—	—1	1.45	50.0	—	2.6	15.8	37.8	43.8	3	—	39.1
	595	22	—	2.9	20.5	33.1	43.5	2½	—	—	—	—	—	—	—	—	—	—	—
	71	25	—	—	21.2	—	—	—	—1	1.45	56.8	—	2.8	14.9	33.4	48.9	3½	—	29.4
R 473	—	14	—	2.1	25.4	37.6	34.9	2	—	—	—	—	—	—	—	—	—	—	—
	472	20	—	2.6	21.4	31.7	44.3	1½	—	—	—	—	—	—	—	—	—	—	—
R 474	—																		

BOORGAT 104 : MC CABES VLEY 1371 : BOREHOLE 104

Kern 3½ dm.

Core 3½ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Grond.....	15	0	—	—	Soil.
Moddersteen, vaal en geel, plek- plek verweer	18	0	—	—	Mudstone, grey and yellow weathered in parts.
Moddersteen, vaal en vaalblou...	164	6	197	6	Mudstone, grey and greyish-blue
Skalie, kleierig, vaalswart, met dun steenkool-aartjies	2	0	199	6	Shale, clayey, greyish-black, with thin coal-stringers.
Steenkool en skalie, gemeng, piriet- houdend	2½	—	199	8½	Coal and shale, mixed pyritic.
Glanskool, gelaag, piriet- en kalsi- ethoudend, effens skalieagtig na onder	2	0½	—	—	Coal, bright, banded, pyritic and calcitic, slightly shaly towards bottom.
Skalie, vaal, met 'n paar steenkool- lagies	5	8	—	—	Shale, grey, with a few coal- bands.
Glanskool, gelaag, skalieagtig...	1	4	—	—	Coal, bright, banded, shaly.
Skalie.....	—	5	—	—	Shale.
Glanskool, gelaag, tussengelaag met skalie	1	4	—	—	Coal, bright, banded, interbedded with shale.
Skalie, swart, vaal na bo, met 15 dm. glanskool 34 dm. van bo af en vier lagies van 6 dm. gemengde steenkool naby middel; wryfvlak naby onderent	9	1	—	—	Shale, black, grey towards top, with 15 in. bright coal 34 in. from top and four 6-in. bands of mixed coal near middle; slickenside near bottom.
Glanskool, gelaag, minderwaardig en piriethoudend na bo	1	3	—	—	Coal, bright, banded, inferior and pyritic towards top.
Skalie- en glanskoolagies, piriet- houdend	1	3½	—	—	Shale and bright coal-bands, pyritic.
Skalie.....	—	4	—	—	Shale.
Glanskool, gelaag, skalieagtig na onder	11½	—	—	—	Coal, bright, banded, shaly towards bottom.
Skalie.....	—	4	—	—	Shale.
Glanskool, gelaag, met kalsiet- en piriethoudende lae	1	9	225	6	Coal, bright, banded, with calcitic and pyritic bands.
Skalie, swart, piriethoudend by bo-ent	2	11	—	—	Shale, black, pyritic at top.
Skalie tussengelaag met steenkool, piriethoudend, met vier skalie- lagies van 3 dm.	6	8	—	—	Shale interbedded with coal, pyritic, with four 3-in. shale bands.
Skalie.....	—	9	235	10	Shale.
Glanskool, gelaag, kalsiethoudend, met dun skalielagies	—	9	—	—	Coal, bright, banded, calcitic, with thin shale bands.
Skalie.....	—	3	—	—	Shale.
Glanskool, gelaag, effens piriet- houdend, met dun skalielagies	1	2	—	—	Coal, bright, banded, slightly pyritic, with thin shale bands.
Skalie met 6 dm. steenkool en tussengelaagde skalie naby onderent	2	6	—	—	Shale with 6 in. coal and inter- bedded shale near bottom.
Skalielae, dun, met heelwat glans- kool	1	8	—	—	Shale bands, thin, with much bright coal.
Glanskool, gelaag, piriethoudend, effens kalsiet- en sideriethou- dend in middelste 6 dm.	2	10	—	—	Coal, bright, banded, pyritic, slightly calcitic and sideritic in middle 6 in.
Skalie met 'n bietjie steenkool by bo-ent	1	1	—	—	Shale with a little coal at top.
Skalie tussengelaag met steenkool	6	2	—	—	Shale interbedded with coal.
Glanskool, gelaag.....	1	8	—	—	Coal, bright, banded.
Skalie tussengelaag met steenkool	1	6	—	—	Shale interbedded with coal.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
glanskool, gelaag, met drie skaliegies (halfduim tot 1 dm.) en 1 dm. gelaagde glanskool met baie dun skaliegies 18 dm. van bo af; onderste 18 dm. effens piriethoudend	6	3	—	—	Coal, bright, banded, with three ½-in. to 1-in. shale bands and 11 in. banded bright coal with very thin shale bands 18 in. from top; bottom 18 in. slightly pyritic.
glanskool, gelaag, met enkele dun skaliegies	1	6	—	—	Shale with a slickenside at top.
glanskool, gelaag, effens piriethoudend	1	5	—	—	Coal, bright, banded, with occasional thin shale bands.
glanskool, gelaag, effens piriethoudend	1	2½	—	—	Shale.
glanskool, gelaag, effens piriethoudend	1	4	—	—	Coal, bright, banded, slightly pyritic.
glanskool, gelaag, effens piriethoudend	1	2½	—	—	Shale and coal, very calcitic.
glanskool, gelaag, met 1 dm. skalie in middel	1	1	—	—	Shale.
glanskool, gelaag, met 1 dm. skalie in middel	1	4	268	9	Coal, bright, banded, with 1 in. shale in middle.
glanskool, gelaag, met 6 dm. glanskool naby onderent	2	9	—	—	Shale, black, with 6 in. bright coal near bottom.
glanskool, gelaag, met 6 dm. glanskool naby onderent	8	8	—	—	Shale and coal, calcitic.
glanskool, gelaag, piriethoudend.	1	6	—	—	Coal, bright, banded, pyritic.
glanskool, erg sideriethoudend...	1	8	—	—	Coal, very sideritic.
glanskool, erg sideriethoudend...	8	3	—	—	Shale, black, with three 2-in. to 4-in. mixed coal and shale bands in bottom 2 ft.
glanskool, gelaag, met 10 dm. van onder af	1	10	285	5	Shale interbedded with coal.
glanskool, gelaag, met 9 dm. glanskool in middel	1	9	287	2	Coal, bright, banded, with thin shale bands, slightly sideritic; ½ in. shale 8 in. from bottom.
glanskool, gelaag, met 9 dm. glanskool in middel	2	10	—	—	Shale, black, with 9 in. bright coal in middle.
glanskool, gelaag, met 4 dm. glanskool in middel	4	7	—	—	Shale interbedded with coal, sideritic and pyritic.
glanskool, gelaag, met 3 dm. glanskool in middel	3	7	—	—	Shale interbedded with coal.
glanskool, gelaag, met 1 dm. glanskool in middel	1	2	—	—	Shale, black.
glanskool, gelaag, met 8 dm. glanskool in middel	8	8	—	—	Shale interbedded with coal.
glanskool, gelaag, met 1 dm. glanskool in middel	1	5	—	—	Shale, greyish-black, clayey.
glanskool, gelaag, met 3 dm. glanskool in middel	3	10	—	—	Shale and banded bright coal, sideritic in top 6 in.; slickenside 10 in. from bottom.
glanskool, gelaag, met 9 dm. glanskool in middel	9	2	—	—	Shale bands, broad, alternating with broad bright coal-bands.
glanskool, gelaag, met 2 dm. glanskool in middel	2	0	—	—	Coal, bright, banded, very shaly in top 6 in., very sideritic in middle.
glanskool, gelaag, met 4 dm. glanskool in middel	4	4	—	—	Shale, black, with two 6-in. bright coal-bands.
glanskool, gelaag, met 1 dm. glanskool in middel	1	11	—	—	Coal, bright, banded, shaly, with 2 in. shale near top, pyritic.
glanskool, gelaag, met 2 dm. glanskool in middel	2	8	—	—	Shale bands alternating with coal-bands.
glanskool, gelaag, met 1 dm. glanskool in middel	1	10	—	—	Coal, bright, with some thin shale bands.
glanskool, gelaag, met 6 dm. glanskool in middel	6	1	—	—	Shale bands, broad, alternating with broad bright coal-bands.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Glanskool, gelaag; onderste helfte erg sideriethoudend	1	8	—	—	Coal, bright, banded; bottom half very sideritic.
Skalie, swart, met sewentien glanskoollae (1 tot 5 dm.), sommige sideriethoudend	17	0	361	0	Shale, black, with seventeen 1-in. to 5-in. bright coal-bands, some sideritic.
Steenkool, erg sideriethoudend, met 'n bietjie skalie	2	7	363	9	Coal, very sideritic, with a little shale.
Skalie, swart, en koolstofhoudende skalie	11	0	—	—	Shale, black, and carbonaceous shale.
Skalielae, breed, en breë glanskoollae om die beurt; sommige lae is sideriethoudend	27	5	—	—	Shale bands, broad, alternating with broad bands of bright coal; some bands are sideritic.
Skalielae, koolstofhoudend; steenkoolagtige skalielae en glanskoollae om die beurt; hoofsaaklik skalie	8	7	—	—	Shale bands, carbonaceous; alternating coaly shale bands and bright coal-bands; mainly shale.
Skalie, koolstofhoudend, met 'n bietjie steenkoolagtige skalie en skalieagtige steenkool	14	0	—	—	Shale, carbonaceous, with a little coaly shale and shaly coal.
Skalie, koolstofhoudend, met 'n bietjie steenkoolagtige skalie en swaar matkool	4	4	429	1	Shale, carbonaceous, with a little coaly shale and heavy dull coal.
Glanskool, gelaag, met drie koolstofhoudende skalielagies van 1 dm., piriethoudend	3	4	432	5	Coal, bright, banded, with three 1-in. carbonaceous shale bands pyritic.
Sandsteen, wit, massief, grofkorrelrig, veldspaties; golwende steenkoolaartjies in boonste 14 dm.	5	3	437	8	Sandstone, white, massive, coarse grained, feldspathic; wavy coal stringers in top 14 in.
Skalie, koolstofhoudend, met 'n bietjie skalieagtige steenkool	3	2	—	—	Shale carbonaceous, with a little shaly coal.
Skalie, kleierig, ligvaal, fossielhoudend	1	5	—	—	Shale, clayey, light grey, fossiliferous.
Glanskool.....		3	—	—	Coal, bright.
Skalie, kleierig, fossielhoudend...	2	5	—	—	Shale, clayey, fossiliferous.
Skalie, koolstofhoudend; skalieagtige steenkool en steenkoolagtige skalie; hoofsaaklik skalie	13	4	—	—	Shale, carbonaceous; shaly coal and coaly shale; mainly shale.
Sandsteen, fyngelaag, fossielhoudend; onderste 3 dm. skalieagtig		11	—	—	Sandstone, laminated, fossiliferous; bottom 3 in. shaly.
Skalie, koolstofhoudend, en swart skalie, plek-plek met swaar, skalieagtige steenkool in onderste helfte	17	4	—	—	Shale, carbonaceous, and black shale with heavy, shaly coal in places in bottom half.
Skalie, ligbruin.....	1	10	—	—	Shale, light brown.
Skalie, swart, plek-plek koolstofhoudend; onderste 4 dm. vaalbruin, met baie fyn kalsietspikkels	10	10	—	—	Shale, black, carbonaceous in parts; bottom 4 in. greyish-brown, with numerous fine calcite specks.
Skalie, koolstofhoudend, in boonste helfte en skalieagtige, piriethoudend matkool in onderste helfte	2	0	491	2	Shale, carbonaceous, in top half and shaly, pyritic dull coal in bottom half.
Matkool met 'n growwe breuk, piriethoudend	2	6	—	—	Coal, dull, with a rough fracture pyritic.
Skalie, koolstofhoudend.....		6	—	—	Shale, carbonaceous.
Matkool met 'n growwe breuk, piriethoudend, skalieagtig in onderste 4 dm.	4	1	—	—	Coal, dull, with a rough fracture pyritic, shaly in bottom 4 in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	<i>Vt.</i> <i>Ft.</i>	<i>Dm.</i> <i>In.</i>	<i>Vt.</i> <i>Ft.</i>	<i>Dm.</i> <i>In.</i>	
Matkool, plek-plek skalieagtig, piriethoudend	4	7	—	—	Coal, dull, shaly in parts, pyritic.
Matkool met baie pirietsluitels.	4	6	—	—	Coal, dull, with numerous pyrite inclusions.
Steenkool, gemeng; hoofsaaklik matkool	2	8	510	0	Coal, mixed; mainly dull coal.
Sandsteen, golwend gelaag, mikahoudend, ligbruin en vaal; onderste 18 dm. donkerkleurig en onderste 3 dm. koolstofhoudend	8	1	518	1	Sandstone in wavy bands, micaceous, light brown and grey; bottom 18 in. dark-coloured and bottom 3 in. carbonaceous.
Matkool en skalie met 'n paar dun, piriethoudende sandsteenlagies	1	5	—	—	Coal, dull, and shale with a few thin, pyritic sandstone bands.
Sandsteen, koolstofhoudend. . . .	1	0	—	—	Sandstone, carbonaceous.
Matkool, skalieagtig, met enkele fyn sandsteenlagies na bo	1	4	521	10	Coal, dull, shaly, with some sandstone laminae towards top.
Steenkool, gemeng; hoofsaaklik matkool met enkele groot pirietsknolle	4	4	—	—	Coal, mixed; mainly dull coal with occasional large pyrite nodules.
Steenkool, gemeng; hoofsaaklik matkool met drie skalieagtige, kalsiethoudende lagies van 2½ dm. by bo-ent, in middel, en by onderent	2	8	—	—	Coal, mixed; mainly dull coal with three 2½-in. shaly, calcitic bands at top, in middle, and at bottom.
Matkool met 'n bietjie glanskool.	3	6	532	4	Coal, dull, with a little bright coal.
Sandsteen, golwend gelaag, mikahoudend, ligbruin en vaal	14	8	—	—	Sandstone in wavy bands, micaceous, light brown and grey.
Sandsteen, baie fynkorrelrig, fyn-gelaag, mikahoudend, donker-vaal tot vaalswart, met enkele dun growwerkorrelrige lagies	7	0	—	—	Sandstone, very fine-grained, laminated, micaceous, dark grey to greyish-black, with thin, coarser-grained bands.
Sandsteen, vaal, middel- tot grofkorrelrig	4	6	—	—	Sandstone, grey, medium- to coarse-grained.
Sandsteen, wit, veldspaties. mas-sief, middel- tot grofkorrelrig	1	10	—	—	Sandstone, white, feldspathic, massive, medium- to coarse-grained.
Sandsteen, swart, skalieagtig; onderste 12 dm. steenkoolagtige en koolstofhoudende skalie	4	4	564	8	Sandstone, black, shaly; bottom 12 in. coaly and carbonaceous shale.
Matkool.	1	7½	—	—	Shale and coal, laminated.
Matkool.	4½	—	566	8	Coal, dull.
Sandsteen, baie fynkorrelrig, golwend gelaag, wit, donkervaal tot swart	2	5	569	1	Sandstone, very fine-grained, in wavy bands, white, dark grey to black.

BOORGAT 104 : MC CABES VLEY 1371 : BOREHOLE 104

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
			Vt. Ft.	Dm. In.	
R 466 C	N.G.....	21½	199	8½	N.S.
	Glanskool, gelaag, piriët- en kalsiethoudend, effens skalieagtig na onder	24½	—	—	Coal, bright, banded, pyritic and calcitic, slightly shaly towards bottom.
	N.G.....	68	—	—	N.S.
	Glanskool, gelaag, skalieagtig	16	—	—	Coal, bright, banded, shaly.
	N.G.....	5	—	—	N.S.
	Glanskool, gelaag, tussenge- laag met skalie	16	—	—	Coal, bright, banded, inter- bedded with shale.
	N.G.....	143½	—	—	N.S.
	Glanskool, gelaag, skalieagtig na onder	11½	—	—	Coal, bright, banded, shaly towards bottom.
	N.G.....	4	—	—	N.S.
	Glanskool, gelaag, met kalsiet- en piriethoudende lae (1 dm. kern verloor)	21	225	6	Coal, bright, banded, with calcitic and pyritic bands (1 in. core lost).
R 467 F E D C B A	N.G.....	9	235	10	N.S.
	Glanskool, gelaag, met dun skalielagies, kalsiethoudend	9	—	—	Coal, bright, banded, with thin shale bands, calcitic.
	N.G.....	3	—	—	N.S.
	Glanskool, gelaag, met dun skalielagies, effens piriët- houdend	14	—	—	Coal, bright, banded, with thin shale bands, slightly pyritic.
	N.G.....	50	—	—	N.S.
	Glanskool, gelaag, piriethou- dend, effens kalsiethoudend, effens sideriethoudend in middelste 6 dm.	34	—	—	Coal, bright, banded, pyritic, slightly calcitic, slightly side- ritic in middle 6 in.
	N.G.....	87	—	—	N.S.
	Glanskool, gelaag.....	20	—	—	Coal, bright, banded.
	N.G.....	18	—	—	N.S.
	Glanskool, gelaag, met drie skalielagies (½ tot 1 dm.) en 11 dm. gelaagde glanskool met baie dun kalielagies 18 dm. van bo af; onderste 18 dm. effens piriethoudend	75	—	—	Coal, bright, banded, with three ½-in. to 1-in. shale bands and 11 in. banded bright coal with very thin shale bands 18 in. from top; bottom 18 in. slightly pyritic.
	N.G.....	18	—	—	N.S.
	Glanskool, gelaag, met enkele dun kalielagies	17	—	—	Coal, bright, banded, with some thin shale bands.
	N.G.....	21½	—	—	N.S.
	Glanskool, gelaag, effens piriethoudend	16	—	—	Coal, bright, banded, slightly pyritic.
	N.G.....	15½	—	—	N.S.
	Glanskool, gelaag, met 1 dm. skalie in middel	16	268	9	Coal, bright, banded, with 1 in. shale in middle.
R 468 A	N.G.....	22	285	5	N.S.
	Glanskool, gelaag, met dun skalielagies, effens sideriet- houdend, met ½ dm. skalie 8 dm. van onder af	21	287	2	Coal, bright, banded, with thin shale bands, slightly sideritic, with ½ in. shale 8 in. from bottom.

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
		<i>Dm.</i> <i>In.</i>	<i>Vt.</i> <i>Ft.</i>	<i>Dm.</i> <i>In.</i>	
469	N.G.....	52	429	1	N.S.
F	Glanskool, gelaag, met drie koolstofhoudende skalie- lagies van 1 dm. piriethou- dend	40	432	5	Coal, bright, banded with three 1-in. carbonaceous shale bands, pyritic.
	N.G.....	63	—	—	N.S.
	N.G.....	642	491	2	N.S.
E	Matkool, met 'n growwe breuk, piriethoudend	30	—	—	Coal, dull, with a rough frac- ture, pyritic.
	N.G.....	6	—	—	N.S.
D	Matkool, met 'n growwe breuk, piriethoudend, ska- lieagtig in onderste 4 dm.	49	—	—	Coal, dull, with a rough frac- ture, pyritic, shaly in bottom 4 in.
C	Matkool, plek - plek skalie- agtig, piriethoudend	55	—	—	Coal, dull, shaly in parts, pyritic.
B	Matkool, met baie piriet- insluitels	54	—	—	Coal, dull, with numerous pyrite inclusions.
A	Steenkool, gemeng; hoofsaak- lik matkool	32	510	0	Coal, mixed; mainly dull coal.
470	N.G.....	16	521	10	N.S.
C	Steenkool, gemeng; hoofsaak- lik matkool met enkele groot pirietknolle	52	—	—	Coal, mixed; mainly dull coal, with occasional large pyrite nodules.
B	Steenkool, gemeng; hoofsaak- lik matkool met drie skalie- agtige, kalsiethoudende lagies van 2½ dm. by bo-ent, in middel, en by onderent	32	—	—	Coal, mixed; mainly dull coal with three 2½-in. shaly, cal- citic bands at top, in middle, and at bottom.
A	Matkool met 'n bietjie glans- kool	42	532	4	Coal, dull, with a little bright coal.

Bg. 104 (verv.)

B.H. 104 (contd.)

No. van B.N.I.-monster F.R.I. sample no.	DIKTE (DM.) THICKNESS (IN.)		RU-STEENKOOI RAW COAL						WASTOETS WASHING TEST		DRYSTOP FLOAT						SINK- STOP SINK	
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. C.V.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	Groot- te (Dm.) Size (In.)	S.G.	Op- brengs Yield %	V.W. C.V.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	As Ash %
R 469	F	40	—	—	25.5	—	—	—	—1	1.45	45.4	12.9	2.8	10.3	34.3	52.6	1½	38.2
	705	30	—	—	21.5	—	—	—	—1	1.58	68.2	12.0	3.0	13.7	21.2	62.1	P	38.2
	—	6	—	—	30.1	—	—	—	—1	1.58	50.9	11.5	3.0	17.0	20.8	59.2	P	43.6
	—	49	—	—	23.5	—	—	—	—1	1.58	77.5	11.1	2.8	19.6	18.6	59.0	P	37.0
	—	55	—	—	23.3	—	—	—	—1	1.58	78.6	11.6	2.4	17.7	22.1	57.8	P	43.7
	—	54	—	—	16.0	—	—	—	—1	1.58	84.7	12.7	2.6	11.6	29.4	56.4	1Ag	40.3
R 470	A	32	—	—	—	—	—	—	—1	1.58	75.5	12.0	2.8	15.8	25.1	56.3	1Ag	45.0
	142	52	—	—	23.1	—	—	—	—1	1.58	73.7	12.3	2.7	14.8	27.3	55.2	1Ag	39.3
	—	32	—	—	23.2	—	—	—	—1	1.58	82.9	12.2	2.7	15.1	24.3	57.9	1Ag	49.7
	—	42	—	—	21.0	—	—	—	—1	1.58								

BOORGAT 105 : ZAAGPUT 718 : BOREHOLE 105

Kern 3½ dm.

Core 3½ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sand.....	15	0	—	—	Sand.
Ouklip.....	25	0	—	—	Laterite.
Moddersteen, vaal en ligblou....	35	4	171	6	Mudstone, grey and light blue.
Skalie, swart, met dun steenkool- lagies	2	1	—	—	Shale, black, with thin coal-bands.
Skalie, kleierig, vaal en vaalblou.	5	3	—	—	Shale, clayey, grey and greyish-blue.
Glanskool, gelaag.....	1	0	—	—	Coal, bright, banded.
Skalie.....		6	—	—	Shale.
Glanskool, gelaag, skalieagtig....	1	0	—	—	Coal, bright, banded, shaly.
Skalie, swart, met vyf steenkool- lagies (2 tot 9 dm.)	7	8	189	0	Shale, black, with five 2-in. to 9-in. coal-bands.
Glanskool, gelaag, skalieagtig na bo en onder, boonste 4 dm. verweer	2	0	191	0	Coal, bright, banded, shaly towards top and bottom, top 4 in. weathered.
Skalielagies en steenkoollagies om die beurt	2	8	—	—	Shale bands alternating with coal-bands.
Glanskool, gelaag, skalieagtig na onder	1	6	—	—	Coal, bright, banded, shaly towards bottom.
Skalie, swart tot donkervaal.....	3	7	—	—	Shale, black to dark grey.
Skalie tussengelaag met steenkool	3	0	—	—	Shale interbedded with coal.
Skalie met steenkoollagies.....	5	10	207	7	Shale with coal-bands.
Skalie tussengelaag met steenkool en skalielae om die beurt	3	10	—	—	Shale interbedded with coal alternating with shale bands.
Glanskool, gelaag.....	2	10	—	—	Coal, bright, banded.
Skalie met 'n wryfvlak in middel.	1	4	—	—	Shale with a slickenside in middle.
Glanskool, gelaag, skalieagtig....	1	5	—	—	Coal, bright, banded, shaly.
Skalie tussengelaag met steenkool	1	9	—	—	Shale interbedded with coal.
Glanskool, tussengelaag met skalie; middelste 6 dm. sideriethoudend	4	5	—	—	Coal, bright, interbedded with shale; middle 6 in. sideritic.
Skalie met 'n bietjie steenkool...		10	—	—	Shale with a little coal.
Glanskool, gelaag, skalieagtig, met ½ dm. skalie in middel en 1 dm. skalie by onderent	2	1	—	—	Coal, bright, banded, shaly, with ½ in. shale in middle and 1 in. shale at bottom.
Glanskool, gelaag, plek-plek pik- agtig, piriethoudend; ½ dm. skalie 15 dm. van bo en 3 dm. skalieagtige steenkool, 8 dm. van onder af	4	2	—	—	Coal, bright, banded, pitch-like in parts, pyritic; ½ in. shale 15 in. from top and 3 in. shaly coal 8 in. from bottom.
Skalielae, breed, en breë lae tussen- gelaagde skalie en steenkool	1	10	232	6	Shale bands, broad, and broad bands of interbedded shale and coal.
Skalie met twee dun steenkool- lagies	3	4	—	—	Shale with two thin coal-bands.
Glanskool, gelaag, effens skalie- agtig	1	4	—	—	Coal, bright, banded, slightly shaly.
Skalie, swart tot donkervaal.....	5	4	—	—	Shale, black to dark grey.
Glanskool, gelaag, met dun skalie- lagies en 3 dm. skalie in middel	2	0	—	—	Coal, bright, banded, with thin shale bands and 3 in. shale in middle.
Skalie; boonste helfte tussengelaag met steenkool	1	11	246	5	Shale; top half interbanded with coal.
Glanskool, gelaag, piriethoudend- met dun skalielagies naby onder- ent	1	0	—	—	Coal, bright, banded, pyritic, with thin shale bands near bottom.
Glanskool, gelaag, sideriet- en kalsiethoudend		7	248	0	Coal, bright, banded, sideritic and calcitic.
Skalie, swart.....	2	0	250	0	Shale, black.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Glanskool , gelaag, effens skalie- agtig by bo-ent en effens sideriet- houdend in onderste helfte	1	8	—	—	Coal, bright, banded, slightly shaly at top and slightly side- ritic in bottom half.
Skalie.....		6	—	—	Shale.
Glanskool , gelaag, piriet- en side- riethoudend	1	0	—	—	Coal, bright, banded, pyritic, and sideritic.
Sideriethoudende laag.....		3	—	—	Sideritic band.
Glanskool , gelaag, sideriethoudend		3	253	10	Coal, bright, banded, sideritic.
Skalie, swart, met 1 dm. erg piriet- houdende steenkool by bo-ent	5	8	—	—	Shale, black, with 1 in. very pyritic coal at top.
Glanskool , gelaag.....	1	0	—	—	Coal, bright, banded.
Skalie, swart, met 7 dm. glanskool naby onderent	4	1	—	—	Shale, black, with 7 in. bright coal near bottom.
Skalie tussengelaag met steenkool	3	7	—	—	Shale interbedded with coal.
Skalie, swart, met 'n steenkool- lagie van 5 dm.	1	11	270	1	Shale, black, with a 5-in. coal- band.
Skalie tussengelaag met steenkool; breë lae en breë skalielae om die beurt	16	5	286	10	Shale interbedded with coal; broad bands alternating with broad bands.
Skalie, swart, met twaalf steen- koollagies (2 tot 6 dm.)	12	10	—	—	Shale, black, with twelve 2-in. to 6-in. coal-bands.
Skalie tussengelaag met steenkool	3	3	—	—	Shale interbedded with coal.
Skalie, swart, met vyf steenkool- lagies van 5 dm. in onderste helfte	7	5	—	—	Shale, black, with five 5-in. coal- bands in bottom half.
Glanskool , gelaag, skalieagtig in boonste 6 dm., met 1 dm. skalie 3 dm. van onder af	1	10	—	—	Coal, bright, banded, shaly in top 6 in. with 1 in. shale 3 in. from bottom.
Skalielae, swart, en steenkoollae om die beurt	6	3	318	5	Shale bands alternating with coal- bands.
Glanskool , gelaag, effens skalie- agtig en sideriethoudend in onderste 11 dm.	2	4	320	9	Coal, bright, banded, slightly shaly and sideritic in bottom 11 in.
Skalie, koolstofhoudend.....	1	3	—	—	Shale, carbonaceous.
Glanskool , gelaag, skalieagtig....	1	3	—	—	Coal, bright, banded, shaly.
Skalie, swart, met vier sideriet- houdende steenkoollagies (1 tot 6 dm.)	13	6	—	—	Shale, black, with four 1-in. to 6-in. sideritic coal-bands.
Glanskool , erg sideriethoudend...	1	0	—	—	Coal, bright, very sideritic.
Skalie.....		8	—	—	Shale.
Steenkool en sideriet.....	1	1	—	—	Coal and siderite.
Skalie, swart.....	5	9	—	—	Shale, black.
Skalie, swart, met 'n ligbruin tint en 'n paar verspreide kwarts- korrels in middelste 18 dm.	8	0	—	—	Shale, black, with a light brown tint and a few scattered quartz grains in middle 18 in.
Skalie, swart, en koolstofhoudende skalie	5	7	—	—	Shale, black, and carbonaceous shale.
Sideriet en steenkool.....	1	4	—	—	Siderite and coal.
Skalie, swart, en koolstofhoudende skalie met twintig glanskool- lagies (2 tot 6 dm.) en lagies tussengelaagde steenkool en skalie, sommige erg sideriet- houdend, plek-plek steenkool- agtig naby onderent	45	9	—	—	Shale, black, and carbonaceous shale with twenty 2-in. to 6-in. bright coal-bands and bands of interbedded coal and shale, some very sideritic, coaly in places near bottom.
Skalie, donkervaal, en 'n bietjie swart skalie	2	9	—	—	Shale, dark grey, and a little black shale.
Skalie, swart, en koolstofhoudende skalie	6	6	415	2	Shale, black, and carbonaceous shale.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sandsteen, swart, baie fynkorrelrig	2	3	417	5	Sandstone, black, very fine-grained.
Sandsteen, swart tot bruinswart, effens mikahoudend, fynkorrelrig, vuilvaal na onder	1	6	—	—	Sandstone, black to brownish-black, slightly micaceous, fine-grained, dirty grey towards bottom.
Sandsteen, fyn- tot grofkorrelrig, wit tot vaalswart, plek-plek fyn-gelaag, veldspaties na onder	8	10	427	9	Sandstone, fine- to coarse-grained, white to greyish-black, laminated in places, feldspathic towards bottom.
Skalie, swart, sanderig by bo-ent	1	11	—	—	Shale, black, sandy at top.
Skalie, koolstofhoudend, en steenkoolagtige skalie met 'n bietjie glanskool en gemengde steenkool	6	6	—	—	Shale, carbonaceous, and coaly shale with a little bright coal and mixed coal.
Skalie, kleiagtig, ligbruin, met talryke wryfvlakke, fossielhoudend	4	2	—	—	Shale, clayey, light brown, with numerous slickensides, fossiliferous.
Skalie, bruin; swart na onder...	1	3	—	—	Shale, brown; black towards bottom.
Skalie, swart; onderste helfte bruinswart	10	2	—	—	Shale, black; bottom half brownish-black.
Skalie, swart, erg sanderig, met 'n sandsteenlagie van 2 dm. in middel	1	0	—	—	Shale, black, very sandy, with a 2-in. sandstone band in middle.
Skalie, koolstofhoudend, met 'n bietjie steenkool en steenkoolagtige skalie en 17 dm. bruinswart skalie naby middel	28	1	—	—	Shale, carbonaceous, with some shaly coal and coaly shale and 17 in. brownish-black shale near middle.
Sandsteen, skalieagtig, donkervaal	11	—	—	—	Sandstone, shaly, dark grey.
Skalie, koolstofhoudend, met 'n bietjie steenkoolagtige skalie in onderste 18 dm.	6	0	487	9	Shale, carbonaceous, with a little coaly shale in bottom 18 in.
Sandsteen, skalieagtig, swart....	2	8	—	—	Sandstone, shaly, black.
Sandsteen, baie fynkorrelrig, ligvaal tot ligbruin; onderste deel skalieagtig	2	5	—	—	Sandstone, very fine-grained, light grey to light brown; bottom portion shaly.
Skalie, ligbruin, erg sanderig....	2	2	—	—	Shale, light brown, very sandy.
Sandsteen, wit en vuilvaal, fyn- tot middelkorrelrig, taamlik massief, plek-plek gelaag en dan effens mikahoudend, veldspaties	23	7	—	—	Sandstone, white to dirty grey, fine- to medium-grained, fairly massive, laminated in places and then slightly micaceous, feldspathic.
Sandsteen, wit, middelkorrelrig, veldspaties, massief, plek-plek taamlik grinterig in onderste 6 vt.	12	10	529	5	Sandstone, white, medium-grained, feldspathic, massive, fairly gritty in places in bottom 6 ft.
Matkool met 'n paar glanskool-lagies na onder	4	4	—	—	Coal, dull, with a few bright coal-bands towards bottom.
Steenkool; hoofsaaklik glanskool; priethoudend	1	1	535	0	Coal; mainly bright coal, pyritic.
Piriet	2	2	535	2	Pyrite.
Sandsteen, wit, vaalwit, en vuilwit, fynkorrelrig, plek-plek effens fyngelaag, elders massief	19	11	—	—	Sandstone, white, greyish-white, and dirty white, fine-grained, slightly laminated in parts, otherwise massive.

Bg. 105 (verv.)

B.H. 105 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sandsteen, donkervaal, vaalswart, en swart, baie fynkorrelrig, kruisgelaag, mikahoudend, effens skalieagtig in onderste 4 vt.; onderste 4 dm. swart en grinterig	10	5	565	6	Sandstone, dark grey, greyish-black, and black, very fine-grained, cross-bedded, micaceous, slightly shaly in bottom 4 ft.; bottom 4 in. black and gritty.
Sandsteen en steenkool, gemeng..	1	10	—	—	Sandstone and coal, mixed.
Skalie, koolstofhoudende skalie, en 'n bietjie steenkool	4	8	—	—	Shale, carbonaceous shale, and a little coal.
Steenkool, skalieagtig; matkool en gemengde steenkool om die beurt; erg piriethoudend, met 1 dm. skalie 8 dm. van onder af	6	2	—	—	Coal, shaly; alternating dull and mixed coal; very pyritic, with 1 in. shale 8 in. from bottom.
Sandsteen, piriethoudend.....		7	579	2	Sandstone, pyritic.
Sandsteen, donkervaal, vaalswart, en swart, baie fynkorrelrig, kruisgelaag, mikahoudend	11	7	—	—	Sandstone, dark grey, greyish-black, and black, very fine-grained, cross-bedded, micaceous.
Sandsteen, swart, fyngelaag, skalieagtig	2	0	—	—	Sandstone, black, laminated, shaly.
Skalie, swart, sanderig, met enkele dun sandsteenlensies; onderste 4 vt. swart, effens sanderige skalie met talryke dun sandsteenlagies en baie verspreide kwartskorrels; onderste 4 dm. swart en grinterig	16	0	608	9	Shale, black, sandy, with some thin sandstone lenses; bottom 4 ft. black, slightly sandy shale, with numerous thin sandstone bands and many scattered quartz grains; bottom 4 in. black and gritty.

BOORGAT 105 : ZAAGPUT 718 : BOREHOLE 105

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
		Dm. In.	Vt. Ft.	Dm. In.	
R 550 A	N.G..... Glanskool, gelaag, skalieagtig na bo en onder; boonste 4 dm. verweer	92 24	180 191	0 0	N.S. Coal, bright, banded, shaly towards top and bottom; top 4 in. weathered.
R 551 D	N.G..... N.G..... Glanskool, gelaag..... N.G.....	70 46 34 117	207 — — —	7	N.S. N.S. Coal, bright, banded. N.S.

Bg. 105 (verv.)

B.H. 105 (contd.)

No. van B.N.L.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
		Dm. In.	Vt. Ft.	Dm. In.	
C	Glanskool, gelaag, skalieagtig met $\frac{1}{2}$ dm. skalie in middel en 1 dm. skalie by onderent	25	—	—	Coal, bright, banded, shaly with $\frac{1}{2}$ in. shale in middle and 1 in. shale at bottom.
B	Glanskool, gelaag, plek-plek pikagtig, piriethoudend; $\frac{1}{2}$ dm. skalie 15 dm. van bo af en 3 dm. skalieagtige steenkool 8 dm. van onder af	50	—	—	Coal, bright, banded, pitch-like in parts, pyritic; $\frac{1}{2}$ in. shale 15 in. from top and 3 in. shaly coal 8 in. from bottom.
	N.G..... (5 dm. kern verloor tussen 207 vt. 7 dm. en 232 vt. 6 dm.)	22	232	6	N.S. (5 in. core lost between 207 ft. 7 in. and 232 ft. 6 in.)
	N.G.....	167	—	—	N.S.
A	Glanskool, gelaag, piriethoudend, met dun skalielagies naby onderent	12	—	—	Coal, bright, banded, pyritic with thin shale bands near bottom.
	Glanskool, gelaag, sideriet- en kalsiethoudend	7	248	0	Coal, bright, banded, sideritic and calcitic.
R 552	N.G.....	24	250	0	N.S.
	Glanskool, gelaag, effens skalieagtig by bo-ent en effens sideriethoudend in onderste helfte	20	—	—	Coal, bright, banded, slightly shaly at top and slightly sideritic in bottom half.
A	N.G.....	6	—	—	N.S.
	Glanskool, gelaag, piriet- en sideriethoudend	12	—	—	Coal, bright, banded, pyritic and sideritic.
	N.G.....	3	—	—	N.S.
	Glanskool, gelaag, sideriethoudend	3	253	10	Coal, bright, banded, sideritic.
R 553	N.G.....	75	318	5	N.S.
C	Glanskool, gelaag, effens skalieagtig en sideriethoudend in onderste 11 dm.	28	320	9	Coal, bright, banded, slightly shaly and sideritic in bottom 11 in.
	N.G. tussen 320 vt. 9 dm. en 529 vt. 5 dm.	2,504	529	5	N.S. between 320 ft. 9 in. and 529 ft. 5 in.
B	Matkool met 'n paar glanskoollagies na onder	52	—	—	Coal, dull, with a few bright coal-bands towards bottom.
	Steenkool; hoofsaaklik glanskool; piriethoudend (2 dm. kern verloor tussen 529 vt. 5 dm. en 535 vt.)	13	535	0	Coal; mainly bright coal; pyritic (2 in. core lost between 529 ft. 5 in. and 535 ft.)
	N.G.....	366	565	6	N.S.
A	N.G.....	78	—	—	N.S.
	Steenkool, skalieagtig; matkool en gemengde steenkool om die beurt; erg piriet-houdend, met 1 dm. skalie 8 dm. van onder af	74	—	—	Coal, shaly; alternating dull and mixed coal; very pyritic, with 1 in. shale 8 in. from bottom.
	N.G..... (5 dm. kern verloor tussen 565 vt. 6 dm. en 579 vt. 2 dm.)	7	579	2	N.S. (5 in. core lost between 565 ft. 6 in. and 579 ft. 2 in.)

BOORGAT 105 : ZAAGPUT 718 : BOREHOLE 105

ANALISE VAN LUGGEDROOGDE STEENKOOI

ANALYSIS OF AIR-DRIED COAL

No. van B.N.I.-monster F.R.I. sample no.	Dikte (Dm.) THICKNESS (IN.)		RU-STEENKOOI RAW COAL						WASTOETS WASHING TEST		DRYSTOF FLOAT						SINK- STOF SINK		
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. lb./lb.	C.V.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	Groot- te (Dm.) Size (In.)	S.G.	Op- brengs Yield %	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	As Ash %
R 550 A	—	24	—	—	—	25.4	—	—	—	—1	1.45	51.2	—	3.1	15.3	35.0	46.6	2½	36.0
R 551 D	245	34	—	—	—	17.9	—	—	—	—1	1.45	78.0	12.2	2.9	14.5	34.6	48.0	3½	29.9
C B	—	25	—	—	—	28.0	—	—	—	—1	1.45	53.3	12.3	3.1	13.7	33.9	49.3	2	44.4
	—	50	—	—	—	21.2	—	—	—	—1	1.45	72.4	12.3	2.9	13.9	35.5	47.7	3½	40.2
A	189	19	10.5	—	2.5	24.8	33.0	39.7	3	—	—	—	—	—	—	—	—	—	—
R 552 A	24	35	—	—	2.2	26.7	34.6	36.5	2½	—1	1.45	32.8	—	—	—	—	—	—	—
R 553 C	780	28	—	—	2.1	28.5	31.8	37.6	2½	—1	1.45	34.6	—	—	—	—	—	—	—
B	2,504	65	—	—	—	24.2	—	—	—	—1	1.58	61.8	11.9	2.6	16.8	23.3	57.3	F	36.1
A	444	74	—	—	—	27.1	—	—	—	—1	1.58	63.4	12.3	2.5	14.1	27.0	56.4	1½	49.5

BOORGAT 106 : ENKELBULT 1361 : BOREHOLE 106

Kern 3½ dm.

Core 3½ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Grond.....	3	0	—	—	Soil.
Moddersteen; onderste 24 vt. geel	70	11	—	—	Mudstone; bottom 24 ft. yellow
Moddersteen, vaal tot donkerblou		10	74	9	Mudstone, grey to dark blue.
Steenkool, verweer.....		4	—	—	Coal, weathered.
Skalie, koolstofhoudend.....		5	75	6	Shale, carbonaceous.
Glanskool, gelaag, kalsiet- en piriethoudend	1	0	76	6	Coal, bright, banded, calcitic and pyritic.
Skalie, swart.....	1	11	79	9	Shale, black.
Skalie tussengelaag met glanskool	1	2	—	—	Shale interbedded with bright coal.
Skalie met ses steenkoollagies (6 tot 10 dm.)	8	2	89	1	Shale with six 6-in. to 10-in. coal bands.
Glanskool, gelaag met 'n piriethoudende, skalieagtige, kalsiet- houdende lagie (2½ dm.) 3 dm. van bo af en 'n soortgelyke lagie (1 dm.) 6 dm. van onder af	1	9	—	—	Coal, bright, banded, with a 2½-in. pyritic, shaly, calcitic band 3 in. from top and a similar 1-in. band 6 in. from bottom.
Skalie, swart.....	3	6	—	—	Shale, black.
Skalielae, breed, en breë, skalie- agtige gelaagde glanskoollae om die beurt, piriethoudend	6	0	—	—	Shale bands, broad, alternating with broad, shaly, banded bright coal-bands, pyritic.
Skalie, swart, met lagies (2 tot 5 dm.) tussengelaagde skalie en steenkool	3	6	—	—	Shale, black, with three 2-in. to 5-in. bands of interbedded shale and coal.
Glanskool, gelaag, skalieagtig na bo	1	8	105	6	Coal, bright, banded, shaly towards top.
Skalie, swart, met 'n bietjie steen- kool in onderste deel	2	11	—	—	Shale, black, with a little coal, in bottom portion.
Skalie tussengelaag met steenkool	1	0	—	—	Shale interbedded with coal.
Glanskool, gelaag, met dun skalie- lagies, piriethoudend	2	6	—	—	Coal, bright, banded, with thin shale bands, pyritic.
Kleierige, bruin materiaal met 'n bietjie steenkool	1	8	—	—	Clayey, brown material with some coal.
Skalie met baie wryfvlakke.....		2	—	—	Shale with many slickensides.
Glanskool, gelaag, met 'n paar dun skalielagies in middel en by onderent	2	9	—	—	Coal, bright, banded, with a few thin shale bands in middle and at bottom.
Skalie.....		4½	—	—	Shale.
Glanskool, gelaag, skalieagtig in boonste 3 dm.; 'n erg sideriet- en piriethoudende lagie (5 dm.) 3 dm. van onder af	2	5	—	—	Coal, bright, banded, shaly in top 3 in.; a 5-in. very sideritic and pyritic band 3 in. from bottom.
Skalie met wryfvlakke na onder.		11½	—	—	Shale with slickensides towards bottom.
Glanskool, gelaag, piriethoudend	1	9	122	0	Coal, bright, banded, pyritic and sideritic.
Skalie; boonste helfte swart, on- derste helfte vaalbruin tot swart, met 'n wryfvlak naby bo-ent	5	2	—	—	Shale; top half black, bottom half greyish-brown to black, with a slickenside near top.
Skalie tussengelaag met steenkool; vier kalielagies (1 tot 3 dm.)	4	2	—	—	Shale interbedded with coal; four 1-in. to 3-in. coal-bands.
Skalie, swart.....	2	0	—	—	Shale, black.
Skalie tussengelaag met steenkool	2	0	—	—	Shale interbedded with coal.
Skalie, swart, met vyf lagies (1 tot 3 dm.) tussengelaagde skalie en steenkool; wryfvlak naby onder- ent	4	3	—	—	Shale, black, with five 1-in. to 3-in. bands of interbedded shale and coal; slickenside near bottom.
Glanskool, gelaag, met dun skalie- lagies en twee skalielae (1 dm. en 2 dm.)	1	9	—	—	Coal, bright, banded, with thin shale bands and two shale bands (1 in. and 2 in.).

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Skalie tussengelaag met steenkool; breë skalielae	19	1	160	5	Shale interbedded with coal; broad shale bands.
Skalie, swart, met nege steenkool-lagies (2 tot 6 dm.)	10	3	—	—	Shale, black, with nine 2-in. to 6-in. coal-bands.
Glanskool, gelaag, skalieagtig in middel en sideriethoudend in onderste 9 dm.	3	7	—	—	Coal, bright, banded, shaly in middle and sideritic in bottom 9 in.
Skalie, swart, met baie glanskool-lagies; een effens skalieagtige glanskoollaag (12 dm.) 5 vt. van bo af en 'n soortgelyke laag (10 dm.) 22 dm. van onder af	10	5	184	8	Shale, black, with many bright coal-bands; one 12-in. slightly shaly bright coal-band 5 ft. from top and a similar 10-in. band 22 in. from bottom.
Glanskool, gelaag, skalieagtig in middel, sideriethoudend in onderste 3 dm., piriethoudend	1	9	186	5	Coal, bright, banded, shaly in middle, sideritic in bottom 3 in., pyritic.
Skalielagies, steenkoolagies, en siderietlagies om die beurt	1	6	—	—	Shale bands alternating with coal-bands and siderite bands.
Skalie, swart, met tien steenkool-lagies (1 tot 6 dm.)	8	3	—	—	Shale, black, with ten 1-in. to 6-in. coal-bands.
Skalielae en sideriethoudende glanskoollae	2	8	—	—	Shale bands and sideritic bright coal-bands.
Skalie, swart, en koolstofhoudende skalie met agt-en-dertig glanskoollae (2 tot 9 dm.) en lae tussengelaagde skalie en steenkool; skalieagtige matkool en steenkoolagtige skalie verskyn in onderste 8 vt.; wryfvlakke 10 vt. van onder af	69	10	—	—	Shale, black, and carbonaceous shale with thirty-eight 2-in. to 9-in. bright coal-bands and bands of interbedded shale and coal; shaly dull coal and coaly shale appear in bottom 8 ft.; slickensides 10 ft. from bottom.
Skalie, koolstofhoudend, met 'n bietjie gemengde steenkool en skalie	2	3	—	—	Shale, carbonaceous, with a little mixed coal and shale.
Skalie, koolstofhoudend, en skalie-agtige steenkool	2	2	273	1	Shale, carbonaceous, and shaly coal.
Steenkool; hoofsaaklik matkool met 5 dm. skalieagtige steenkool 10 dm. van bo af	2	7	—	—	Coal, mainly dull coal with 5 in. shaly coal 10 in. from top.
Skalie, koolstofhoudend, en skalie-agtige steenkool met 'n bietjie gemengde steenkool en vaal skalie	1	6	—	—	Shale, carbonaceous, and shaly coal with a little mixed coal and grey shale.
Steenkool, gemeng, piriethoudend, skalieagtig na bo, met 5 dm. koolstofhoudende skalie in middel en 1 dm. skalie naby onderent	3	3	280	5	Coal, mixed, pyritic, shaly towards top, with 5 in. carbonaceous shale in middle and 1 in. shale near bottom.
Skalie, koolstofhoudend, met 'n bietjie skalieagtige steenkool en gemengde steenkool	16	4	296	9	Shale, carbonaceous, with a little shaly coal and mixed coal.
Sandsteen, baie fynkorrelrig, fyn-gelaag, donkervaal	1	8	—	—	Sandstone, very fine-grained, laminated, dark grey.
Steenkool		2	—	—	Coal.
Skalie, vaal tot swart, met talryke ligvaal strepies in onderste 10 dm.; bevat onherkenbare fossiele	3	3	—	—	Shale, grey to black, with numerous light grey laminae in bottom 10 in.; contains unrecognisable fossils.
Skalie, steenkoolagtig; skalieagtige steenkool, en minderwaardige matkool met 'n bietjie glanskool	4	2	—	—	Shale, coaly; shaly coal, and inferior dull coal, with a little bright coal.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Skalie, swart, en koolstofhoudende skalie met bruinagtige skalie in boonste en middelste 30 dm.; enkele skalieagtige gedeeltes van matkool	15	6	—	—	Shale, black, and carbonaceous shale with brownish shale in top and middle 30 in.; a few shaly dull coal portions.
Steenkool; hoofsaaklik glansende matkool		11	—	—	Coal; mainly lustrous dull coal.
Skalie en steenkeel, gemeng, piriethoudend, met 'n wryfvlak		10	—	—	Shale and coal, mixed, pyritic, with a slickenside.
Skalie.....	1	5	324	8	Shale.
Matkool, glansend, piriethoudend	2	5	—	—	Coal, dull, lustrous, pyritic.
Piriethoudende laag.....		1	—	—	Pyritic band.
Skalie, steenkoolagtig.....		3½	—	—	Shale, coaly.
Matkool met 'n oneffe kubiese breuk	1	2	—	—	Coal, dull, with a rough cubic fracture.
Steenkool; hoofsaaklik matkool; piriethoudend	1	4	—	—	Coal; mainly dull coal, pyritic.
Steenkool; hoofsaaklik matkool met 'n oneffe kubiese breuk; piriethoudend	2	5	—	—	Coal; mainly dull coal with a rough cubic fracture; pyritic.
Steenkool, skalieagtig.....	1	1	—	—	Coal, shaly.
Steenkool; hoofsaaklik glansende matkool	2	8	—	—	Coal; mainly lustrous dull coal.
Steenkool; hoofsaaklik matkool; piriethoudend	6	4	—	—	Coal; mainly dull coal; pyritic.
Steenkool; hoofsaaklik matkool; piriethoudend; minderwaardig in onderste 5 dm.	4	4	—	—	Coal; mainly dull coal; pyritic; inferior in bottom 5 in.
Steenkool; hoofsaaklik gelaagde glanskool; dowwer en minderwaardig na bo	3	4	350	6	Coal; mainly banded, bright coal; duller and inferior towards top.
Sandsteen, baie fynkorrelrig, fyn-gelaag, ligbruin, donkervaal, witvaal, en witterig, met 'n paar golwende lagies; enkele breë, grofkorrelrige tot grintagtige, vuilvaal sandsteenlagies en swart, skalieagtige sandsteenlagies in onderste 5 vt.	13	6	364	0	Sandstone, very fine-grained, laminated, light brown, dark grey, whitish-grey, and whitish, with a few wavy layers; some broad, coarse-grained to gritty, dirty grey sandstone bands and black, shaly sandstone bands in bottom 5 ft.
Matkool, plek-plek skalieagtig, met 5½ dm. skalie 23 dm. van bo af, piriethoudend in middel	8	6	—	—	Coal, dull, shaly in parts, with 5½ in. shale 23 in. from top, pyritic in middle.
Matkool, glansend, met enkele glanskoolstrepies en skalie-lagies van 1½ dm. in middel en by onderent	4	1	—	—	Coal, dull, lustrous, with occasional bright coal-streaks and 1½-in. shale bands in middle and at bottom.
Steenkool; hoofsaaklik matkool; piriethoudend, met 1 dm. sandsteen 4 dm. van onder af	1	7	378	2	Coal; mainly dull coal; pyritic, with 1 in. sandstone 4 in. from bottom.
Sandsteen, fynkorrelrig tot baie fynkorrelrig, vaalbruin, vaal, en wit, fyn-gelaag, met 'n paar breë, donkervaal tot swart mikahoudende lagies; golwende lae in onderste 2 vt.	30	5	—	—	Sandstone, fine- to very fine-grained, greyish-brown, grey, and white, laminated, with a few broad, dark grey to black, micaceous bands; wavy bands in bottom 2 ft.

Bg. 106 (verv.)

B.H. 106 (contd.)

Aard van lae	Dikte verkry Thickness recorded		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sandsteen, golwende lagies swart, skalieagtige sandsteen en vuilvaal tot vaalswart, middel- tot grofkorrelrige lagies om die beurt; onderste 9 dm. middelkorrelrig, massief, vaalswart	17	0	425	7	Sandstone; wavy layers of black, shaly sandstone alternating with dirty grey to greyish-black, medium- to coarse-grained bands; bottom 9 in. medium-grained, massive, greyish-black.
Matkool met 2 dm. koolstofhoudende sandsteen 3 dm. van bo af en 'n soortgelyke lagie (3 dm.) 16 dm. van bo af, piriethoudend na onder	5	11	431	6	Coal, dull, with 2 in. carbonaceous sandstone 3 in. from top and a similar 3-in. band 16 in. from top, pyritic towards bottom.
Skalie, swart, sanderig.....	2	6	434	0	Shale, black, sandy.

BOORGAT 106 : ENKELBULT 1361 : BOREHOLE 106

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recorded	Ware diepte True depth		Nature of strata
		Dm. In.	Vt. Ft.	Dm. In.	
R 539	N.G.....	98	89	1	N.S.
F	Glanskool, gelaag, met 'n piriethoudende, skalieagtige, kalsiethoudende lagie (2½ dm.) 3 dm. van bo af en 'n soortgelyke lagie (1 dm.) 6 dm. van onder af	21	—	—	Coal, bright, banded, with a 2½-in. pyritic, shaly, calcitic band 3 in. from top and a similar 1-in. band 6 in. from bottom.
E	N.G.....	156	—	—	N.S.
	Glanskool, gelaag, skalieagtig na bo	20	105	6	Coal, bright, banded, shaly towards top.
D	N.G.....	47	—	—	N.S.
	Glanskool, gelaag, met dun skalielagies, piriethoudend	30	—	—	Coal, bright, banded, with thin shale bands, pyritic.
C	N.G.....	22	—	—	N.S.
	Glanskool, gelaag, met 'n paar dun skalielagies in middel en by onderent	33	—	—	Coal, bright, banded, with a few thin shale bands in middle and at bottom.
B	N.G.....	4½	—	—	N.S.
	Glanskool, gelaag, skalieagtig in boonste 3 dm.; 'n erg sideriet- en piriethoudende lagie (5 dm.) 3 dm. van onder af	29	—	—	Coal, bright, banded, shaly in top 3 in.; a 5-in very sideritic and pyritic band 3 in. from bottom.
A	N.G.....	11½	—	—	N.S.
	Glanskool, gelaag, piriethoudend	21	122	0	Coal, bright, banded, pyritic and sideritic.
R 540	N.G.....	125	184	8	N.S.
A	Glanskool, gelaag, skalieagtig in middel en sideriethoudend in onderste 3 dm., piriethoudend	21	186	5	Coal, bright, banded, shaly in middle and sideritic in bottom 3 in., pyritic.

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
			Dm. In.	Vt. Ft.	
R 541 B	N.G.....	26	273	1	N.S.
	Steenkool; hoofsaaklik mat- kool met 5 dm. skalieagtige steenkool 10 dm. van bo af	31	—	—	Coal; mainly dull coal with 5 in. shaly coal 10 in. from top.
	N.G.....	18	—	—	N.S.
	A Steenkool, gemeng, piriethou- dend, skalieagtig na bo, met 5 dm. koolstofhoudende skalie in middel en 1 dm. skalie naby onderent	39	280	5	Coal, mixed, pyritic, shaly towards top, with 5 in. carbonaceous shale in middle and 1 in. shale near bottom.
R 542 E	N.G.....	17	324	8	N.S.
	Matkool, glansend, piriethou- dend	29	—	—	Coal, dull, lustrous, pyritic.
	N.G.....	4½	—	—	N.S.
	Matkool met 'n oneffe kubiese breuk	14	—	—	Coal, dull, with a rough cubic fracture.
	D Steenkool; hoofsaaklik mat- kool; piriethoudend	16	—	—	Coal; mainly dull coal; pyritic.
	Steenkool; hoofsaaklik mat- kool met 'n oneffe kubiese breuk; piriethoudend	29	—	—	Coal; mainly dull coal with a rough cubic fracture; pyritic.
	N.G.....	13	—	—	N.S.
	Steenkool; hoofsaaklik glan- sende matkool	—	—	—	Coal, mainly lustrous dull coal.
	C Steenkool; hoofsaaklik mat- kool; piriethoudend	76	—	—	Coal; mainly dull coal; pyritic.
	B Steenkool; hoofsaaklik mat- kool; piriethoudend, min- derwaardig in onderste 5 dm.	52	—	—	Coal, mainly dull, pyritic, inferior in bottom 5 in.
	A Steenkool; hoofsaaklik ge- laagde glanskool; dowwer en minderwaardig na bo (4½ dm. kern verloor tussen 324 vt. en 350 vt. 6 dm.)	40	350	6	Coal; mainly banded bright coal; duller and inferior towards top (4½ in. core lost between 324 ft. and 350 ft. 6 in.).
R 543 D	N.G.....	162	364	0	N.S.
	Matkool, plek - plek skalie- agtig, met 5½ dm. skalie 23 dm. van bo af, piriethou- dend in middel	102	—	—	Coal, dull, shaly in parts, with 5½ in. shale 23 in. from top, pyritic in middle.
	C Matkool, glansend, met enkele glanskoolstrepies en skalie- lagies (1½ dm.) in middel en by onderent	49	—	—	Coal, dull, lustrous, with occa- sional bright coal-streaks and 1½ in. shale bands in middle and at bottom.
	B Steenkool; hoofsaaklik mat- kool; piriethoudend, met 1 dm. sandsteen 4 dm. van onder af uitgesluit	19	378	2	Coal; mainly dull coal; pyritic, with 1 in. sandstone 4 in. from bottom excluded.
	N.G.....	365	—	—	N.S.
	N.G.....	204	425	7	N.S.
	A Matkool met 2 dm. koolstof- houdende sandsteen 3 dm. van bo af en 'n soortgelyke lagie (3 dm.) 16 dm. van bo af, piriethoudend na onder	71	431	6	Coal, dull, with 2 in. carbona- ceous sandstone 3 in. from top and a similar 3-in. band 16 in. from top, pyritic, towards bottom.

ANALISE VAN LUGGEDROOGDE STEENKOOI

ANALISE VAN LUGGEDROOGDE STEENKOOI																								
No. van B.N.I.-monster F.R.I. sample no.		DIKTE (DM.) THICKNESS (IN.)		RU-STEENKOOI RAW COAL						WASTOETS WASHING TEST		DRY-TOF FLOAT						SINK- STOF SINK						
		Uit- gesluit	Ge- mon- ster Sam- pled	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	Groot- te (DM.) Size (in.)	S.G.	Op- brengs Yield %	V.W. C.W. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	As %	Ash %				
R 539	F	—	21	—	2.3	23.7	29.5	44.5	2	—	—	—	—	—	—	—	—	—	—	—	—			
	E	156	20	—	2.4	24.6	33.9	39.1	14g	—	—	—	—	—	—	—	—	—	—	—	—			
	D	47	30	—	—	21.7	—	—	—	—	1.45	63.3	—	2.5	16.5	34.2	46.8	3½	30.7	—	—			
	C	22	33	—	—	23.8	—	—	—	—	1.45	63.2	—	3.1	14.8	34.0	48.1	4	39.3	—	—			
	B	4½	29	—	2.0	31.4	32.0	34.6	1½	—	1.45	35.7	—	—	—	—	—	—	—	—	—			
	A	11½	21	—	2.4	24.2	32.3	41.1	2½	—	—	—	—	—	—	—	—	—	—	—	—			
R 540	A	752	21	11.0	2.2	22.7	31.8	43.3	3	—	—	—	—	—	—	—	—	—	—	—	—			
	B	1,040	31	—	2.1	26.8	24.9	46.2	F	—	1.58	55.1	—	—	—	—	—	—	—	—	—			
R 541	A	18	39	—	2.0	24.8	28.8	44.4	1½	—	1.58	58.0	—	—	—	—	—	—	—	—	—			
	E	531	29	10.3	2.5	24.5	19.0	54.0	P	—	1.58	54.4	—	—	—	—	—	—	—	—	—			
R 542	D	4½	59	—	—	22.5	—	—	—	—	1.58	60.1	12.4	2.8	13.2	21.0	63.0	P	36.4	—	—			
	C	13	108	—	—	23.5	—	—	—	—	1.58	67.8	12.2	2.5	14.6	22.2	60.7	P	42.2	—	—			
	B	—	52	—	—	25.2	—	—	—	—	1.58	56.3	12.1	2.4	15.1	21.8	60.7	P	38.3	—	—			
	A	—	40	—	—	13.9	—	—	—	—	1.35	32.0	14.0	2.6	4.5	34.9	58.0	2	—	—	—			
		—	—	—	—	—	—	—	—	—	1.35	51.5	12.9	2.4	11.0	26.3	60.3	P	41.3	—	—			
		—	—	—	—	—	—	—	—	—	1.58	83.5*	13.3*	2.5*	8.5*	29.6*	59.4*	—	—	—	—			
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* Bereken / Calculated.

Bg. 106 (verv.)

B.H. 106 (contd.)

No. van B.N.I.-monster F.R.I. sample no.	Dikte (Dm.) THICKNESS (IN.)		RU-STEENKOOL RAW COAL								WASTOETS WASHING TEST		DRY-STOP FLOAT						SINK- STOP SINK	
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. lb./lb.	H ₂ O %	As %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	Groot- te (Dm.) Size (In.)	S.G.	Op- brengs Yield %	V.W. C.V. lb./lb.	H ₂ O %	As %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	As %	Ash %	
R 543	—	102	—	—	24.3	—	—	—	—1	1.58	60.6	12.4	2.4	14.1	23.8	59.7	P	40.1	—	
	—	49	—	—	16.0	—	—	—	—1	1.58	89.4	12.6	2.4	13.4	23.9	60.3	P	38.2	—	
	—	19	—	—	18.7	—	—	—	—1	1.58	78.3	13.4	2.3	9.8	31.9	56.0	1½	50.8	—	
	569	71	—	—	16.1	—	—	—	—1	1.58	85.5	12.8	2.4	11.9	23.3	62.4	P	41.1	—	

BOORGAT 107 : TURFVLAKTE 1358 : BOREHOLE 107

Kern 3½ dm.

Core 3½ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
ond.....	1	0	—	—	Soil.
oervlakkalksteen.....	20	0	—	—	Surface-limestone.
oerweerde materiaal.....	60	0	81	0	Weathered material.
oersteen, baie hard (stampboor)	4	6	85	6	Sandstone, very hard (jump-drill).
oersteen, fyngelaag, baie fynkorrelrig, effens mikahoudend, donkervaal tot swart	9	3	94	9	Sandstone, laminated, very fine-grained, slightly micaceous, dark grey to black.
skalie, swart, koolstofhoudende skalie, en steenkoolagtige skalie met 6 dm. erg piriethoudende steenkool by onderent	5	9	101	0	Shale, black, carbonaceous shale, and coaly shale with 6 in. very pyritic coal at bottom.
oersteen; fynkorrelrige, swart tot donkervaal lagies en vuilvaal tot vaalswart lagies om die beurt; onderste 3 vt. grofkorrelrig, met golwende steenkoolagies	8	6	109	6	Sandstone; fine-grained, black to dark grey bands alternating with dirty grey to greyish-black bands; bottom 3 ft. coarse-grained, with wavy coal-bands.
steenkool; hoofsaaklik matkool met baie wryfvlakke in boonste helfte; 'n piriethoudende lagie van 'n halfduim 22 dm. van bo af en 3 dm. skalie en steenkool 4 dm. van onder af	6	1	—	—	Coal; mainly dull coal with many slickensides in top half; a ½-in. pyritic band 22 in. from top and 3 in. shale and coal 4 in. from bottom.
skalie.....	3	1	116	2	Shale.
oersteen, fynkorrelrig, vaalswart tot swart, fyngelaag, plek-plek effens skalieagtig	3	1	—	—	Sandstone, fine-grained, greyish-black to black, laminated, slightly shaly in places.
steenkool; lens met 'n wryfvlak..	—	0½	—	—	Coal; lens with a slickenside.
oersteen, fynkorrelrig, donkervaal, witvaal, vuilvaal, en swart, fyngelaag, met wit tot vuilvaal, middelkorrelrige gedeeltes van 2 vt. in middel en naby bo-ent	20	1	—	—	Sandstone, fine-grained, dark grey, whitish-grey, dirty grey, and black, laminated, with white to dirty grey, medium-grained portions of 2 in. in middle and near top.
oersteen; golwende lagies swart, anderige skalie en skalieagtige sandsteen om die beurt met donkervaal tot vuilwit, middelkorrelrig tot grofkorrelrige lagies	9	10	—	—	Sandstone; bands of black, sandy shale and shaly sandstone alternating with dark grey to dirty white, medium- to coarse-grained bands.
oersteen, vaalwit, middelkorrelrig, hard	1	11	151	7	Sandstone, greyish-white, medium-grained, hard.
steenkool, meer glansend na bo en onder, piriethoudend	4	9	—	—	Coal, dull, brighter towards top and bottom, pyritic.
skalie.....	—	2	156	10	Shale.
skalie, swart, sanderig, met twee dun steenkoolensies	1	3	—	—	Shale, black, sandy, with two thin coal lenses.
oersteen, donkervaal tot swart, fynkorrelrig, effens fyn gelaag in boonste helfte met donkervaal tot swart en vuilvaal tot wit, golwende lagies in onderste helfte	8	0	166	1	Sandstone, dark grey tot black, fine-grained, slightly laminated in top half, with dark grey to black and dirty grey to white, wavy bands in bottom half.

BOORGAT 107 : TURFVLAKTE 1358 : BOREHOLE 107

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
		Dm. In.	Vt. Ft.	Dm. In.	
R 538 B	N.G.....	102	109	6	N.S.
	Steenkool; hoofsaaklik mat- kool met baie wryfvlakke in boonste helfte; 'n piriethoudende lagie van 'n half- duim 22 dm. van bo af en 3 dm. skalie en steenkool 4 dm. van onder af	73	—		Coal; mainly dull coal with many slickensides in top half; a ½-in. pyritic band 22 in. from top and 3 in. from shale and coal 4 in. from bottom.
	N.G..... (6 dm. kern verloor tussen 109 vt. 6 dm. en 116 vt. 2 dm.)	1	116	2	N.S. (6 in. core lost between 109 ft. 6 in. and 116 ft. 2 in.)
A	N.G.....	425	151	7	N.S.
	Matkool, meer glansend na bo en onder piriethoudend	57	—		Coal, dull, brighter toward top and bottom, pyritic.
	N.G..... (4 dm. kern verloor tussen 151 vt. 7 dm. en 156 vt. 10 dm.)	2	156	10	N.S. (4 in. core lost between 151 ft. 7. in. and 156 ft. 10 in.)

BOORGAT 107 : TURFVLAKTE 1358 : BOREHOLE 107

ANALISE VAN LUGGEDROOGDE STEENKOOL

ANALYSIS OF AIR-DRIED COAL

No. van B.N.I.-monster F.R.I. sample no.	Dikte (Dm.) THICKNESS (IN.)		RU-STEENKOOL RAW COAL								WASTOETS WASHING TEST		DRY-TOF FLOAT								SINK- STOF SINK	
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	Groot- te (Dm.) Size (In.)	S.G.	Op- brengs Yield %	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	As Ash %	%			
R 538 B	—	73	10.4	1.8	25.9	23.3	49.0	P	—1	1.58	54.9	—	—	—	—	—	—	—	—			
A	426	57	—	—	13.9	—	—	—	—1	1.58	90.3	13.0	2.2	11.1	23.2	63.5	F	39.7				

BOORGAT 108 : DAARBY 1369 : BOREHOLE 108

Kern 3½ dm.

Core 3½ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Moddersteen en skalie (stamp-boor). Stukkies moddersteen uit die boorgat dui die voorkoms van onverweerde, soliede moddersteen aan	62	4	62	4	Mudstone and shale (jump-drill). Pieces of mudstone from the borehole signify the occurrence of unweathered, solid mudstone
Skalie tussengelaag met steenkool		4	62	8	Shale interbedded with coal.
Glanskool, gelaag, met enkele dun skalielagies na bo en 'n sideriet-houdende lagie van 'n halfduim in middel	1	11	—	—	Coal, bright, banded, with occasional thin shale bands towards top and a ½-in. sideritic band in middle.
Skalie, swart, met 6 dm. steenkool in middel	1	9	—	—	Shale, black, with 6 in. coal in middle.
Skalie tussengelaag met steenkool; 16 dm. gelaagde glanskool 19 dm. van onder af	6	5	—	—	Shale interbedded with coal; 16 in. banded bright coal 19 in. from bottom.
Skalie en steenkool, gemeng.....		6	—	—	Shale and coal, mixed.
Glanskool, gelaag, piriethoudend, met skalielagies (1½ dm.) 20 dm. van bo af en 10 dm. van onder af; kern plek-plek gebreek	4	9	—	—	Coal, bright, banded, pyritic, with 1½-in. shale bands 20 in. from top and 10 in. from bottom; core broken in places.
Skalie met 'n bietjie glanskool naby bo-ent	1	10	80	1	Shale with a little bright coal near top.
Glanskool, gelaag, plek-plek pikagtig, piriethoudend, met 3 dm. skalie 6 dm. van onder af	1	9	—	—	Coal, bright, banded, pitchlike in parts, pyritic, with 3 in. shale 6 in. from bottom.
Skalie, swart, met baie wryfvlakke in boonste helfte	6	4	—	—	Shale, black, with slickensides in top half.
Glanskool, gelaag, erg piriethoudend, met skalielagies		10	—	—	Coal, bright, banded, very pyritic, with shale bands.
Skalie.....		3	89	3	Shale.
Glanskool, gelaag, skalieagtig in middel en sideriethoudend na onder	1	4	—	—	Coal, bright, banded, shaly in middle and sideritic towards bottom.
Glanskool, gelaag, en sideriet....		4	—	—	Coal, bright, banded, and sideritic.
Glanskool, gelaag, piriethoudend, met ½ dm. skalie 8 dm. van bo af	2	5	93	4	Coal, bright, banded, pyritic, with ½ in. shale 8 in. from top.
Skalie met 'n wryfvlak.....		7	—	—	Shale, with a slickenside.
Glanskool, gelaag, skalieagtig na bo, piri- en sideriethoudend	1	4	—	—	Coal, bright, banded, shaly towards top, pyritic and sideritic.
Glanskool, boonste helfte erg sideriethoudend		11	—	—	Coal, bright, top half very sideritic.
Skalie.....		11	—	—	Shale.
Glanskool, gelaag, met 'n paar dun skalielagies, piri- en sideriethoudend	1	4	—	—	Coal, bright, banded, with a few thin shale bands, pyritic and sideritic.
Skalie, swart; onderste 3 vt. bruinswart, met nege steenkoollagies (2 tot 6 dm.) en skalieagtige steenkoollagies (13 dm.) 40 dm. en 8 vt. van onder af	20	5	—	—	Shale, black; bottom 3 ft. brownish-black with nine 2-in. to 6-in. coal bands and 13-in. shaly coal-bands 40 in. and 8 ft. from bottom.
Skalie tussengelaag met steenkool; 13 dm. skalie naby middel	12	2	—	—	Shale interbedded with coal; 13 in. shale near middle.
Skalie, swart, met skalie en steenkoollae om die beurt in onderste 8 vt.; elf dun steenkoollagies kom voor	25	8	156	8	Shale, black, with alternating shale and coal bands in bottom 8 ft.; eleven thin coal-bands occur.
Glanskool, gelaag, plek-plek skalieagtig, piriethoudend	1	9	—	—	Coal, bright, banded, shaly in parts, pyritic.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
alie, swart, met 10 dm. glanskool 31 dm. van bo af en vyftien glanskoollagies (2 tot 5 dm.); wryfvlak 7 vt. van bo af	16	6	—	—	Shale, black, with 10 in. bright coal 31 in. from top and fifteen 2-in. to 5-in. bright coal-bands; slickenside 7 ft. from top.
alie tussengelaag met steenkool	2	3	—	—	Shale interbedded with coal.
lanskool, gelaag, sideriethoudend		9	—	—	Coal, bright, banded, sideritic.
alie, swart	1	10	179	9	Shale, black.
lanskool, gelaag, met drie skalie-lagies (2 dm., 1½ dm., en 1 dm.)	2	6	—	—	Coal, bright, banded, with 2-in., 1½ in., and 1-in. shale bands.
alie	1	8	—	—	Shale.
lanskool, gelaag, met 'n paar dun skalielagies; sideriethoudend in middel en by onderent	1	8	186	4	Coal, bright, banded, with a few thin shale bands; sideritic in middle and at bottom.
alie, swart en koolstofhoudende skalie met glanskoollae (12 dm.) by 208 vt. en 220 vt. en drie-entwintig steenkoollagies (2 tot 7 dm.), sommige skalieagtig; talryke wryfvlakke tussen 221 en 222 vt.	57	11	—	—	Shale, black, and carbonaceous shale with 12-in. bright coal-bands at 208 ft. and 220 ft. and twenty-three 2-in. to 7-in. coal-bands, some shaly; numerous slickensides between 221 and 222 ft.
alie, koolstofhoudend, en steenkoolagtige skalie	5	10	250	1	Shale, carbonaceous, and coaly shale.
eenkool; hoofsaaklik matkool met 7 dm. koolstofhoudende skalie en minderwaardige steenkool 26 dm. van bo af	3	5	—	—	Coal; mainly dull coal with 7 in. carbonaceous shale and inferior coal 26 in. from top.
alie, koolstofhoudend		5	—	—	Shale, carbonaceous.
lanskool, gelaag, piriethoudend, met 1½ dm. koolstofhoudende skalie 13 dm. van bo af en 2 dm. vaal skalie 10 dm. van onder af	3	4	257	3	Coal, bright, banded, pyritic, with 1½ in. carbonaceous shale 13 in. from top and 2 in. grey shale 10 in. from bottom.
alie, swart, sanderig na onder.	1	7	—	—	Shale, black, sandy towards bottom.
andsteen, swart, skalieagtig	2	5	—	—	Sandstone, black, shaly.
andsteen, swart, fynkorrelrig, grinterig by onderent	1	10	—	—	Sandstone, black, fine-grained, gritty at bottom.
alie, swart, effens sanderig	1	9	—	—	Shale, black, slightly sandy.
alie, swart, en koolstofhoudende skalie, plek-plek met steenkoolagtige dele	9	10	—	—	Shale, black, and carbonaceous shale with coaly portions in parts.
alie, swart, en swartvaal skalie, met talrykeligvaal lagies; fossielhoudend	4	0	278	8	Shale, black, and blackish-grey shale with numerous light grey laminae; fossiliferous.
alie, koolstofhoudend en skalieagtige steenkool; onderste 10 vt. ligbruin	19	11	—	—	Shale, carbonaceous, and shaly coal; bottom 10 ft. light brown.
atkool, swaar; onderste helfte skalieagtig en erg piriethoudend	2	3	300	10	Coal, dull, heavy; bottom half shaly and very pyritic.
eenkool; hoofsaaklik matkool; meer glansend in middel, met 6 dm. minderwaardige steenkool 20 dm. van bo af, kalsiethoudend	4	10	—	—	Coal; mainly dull coal; brighter in middle, with 6 in. inferior coal 20 in. from top, calcitic.
eenkool; hoofsaaklik matkool; meer glansend by onderent	1	4	—	—	Coal; mainly dull coal; brighter at bottom.
alie, koolstofhoudend, en skalieagtige steenkool		8	—	—	Shale, carbonaceous, and shaly coal.
eenkool; hoofsaaklik matkool, piriethoudend, met 2 dm. minderwaardige steenkool 20 dm. van onder af	4	11	—	—	Coal; mainly dull coal; pyritic, with 2 in. inferior coal 20 in. from bottom.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Skalie, koolstofhoudend.....		5	—		Shale, carbonaceous.
Steenkool, hoofsaaklik matkool..	4	0	—		Coal, mainly dull.
Matkool, meer glansend na onder, met 'n skalieagtige lagie (3 dm.) 3 dm. van onder af, piriethou- dend	5	4	—		Coal, dull, brighter towards bot- tom, with a 3-in. shaly band 3 in. from bottom, pyritic.
Glanskool, gelaag, piriethoudend.	1	11	324	6	Coal, bright, banded, pyritic.
Sandsteen, baie fynkorrelrig, fyn- gelaag, donkervaal en bruinvaal	6	7	—		Sandstone, very fine-grained, lami- nated, dark grey and brownish grey.
Sandsteen, vuilvaal tot vuilwit, middel- tot grofkorrelrig, veld- spaties, met golwende lagies swart, skalieagtige sandsteen	4	3	335	6	Sandstone, dirty grey to dirty white, medium- to coarse- grained, felspathic, with wavy layers of black, shaly sandstone
Steenkool, gemeng.....		3	—		Coal, mixed.
Skalie.....		5	336	2	Shale.
Matkool met 'n skalieagtige lagie (2 dm.) 7 dm. van onder af	4	2	—		Coal, dull, with a 2-in. shaly band 7 in. from bottom.
Steenkool, glansend by die ente en dof in middel, plek-plek minder- waardig	1	7	—		Coal, bright at ends and dull in middle, inferior in parts.
Matkool met 'n minderwaardige voorkoms, piriethoudend	3	2	—		Coal, dull, inferior-looking, pyri- tic.
Steenkool; hoofsaaklik matkool met 'n skalieagtige, kalsiethou- dende lagie (1½ dm.) in middel	1	6	—		Coal; mainly dull coal with a 1½-in. shaly, calcitic band in middle.
Steenkool, gemeng; hoofsaaklik matkool; piriethoudend	3	0	349	7	Coal, mixed; mainly dull coal pyritic.
Sandsteen, baie fynkorrelrig, fyn- gelaag, mikahoudend, ligbruin; boonste gedeelte skalieagtig	3	3	352	10	Sandstone, very fine-grained, lami- nated, micaceous light brown, top portion shaly.
Steenkool, gemeng, hoofsaaklik matkool; piriethoudend	1	0	—		Coal, mixed; mainly dull coal pyritic.
Sandsteen, baie fynkorrelrig, fyn- gelaag, ligbruin, vaalbruin vaal, en witterig, met enkele golwende lagies, veral na onder waar lagies middelkorrelrig is	16	3	—		Sandstone, very fine-grained, lami- nated, light - brown, greyish- brown, grey, and whitish, with a few wavy layers, especially towards bottom, where layers are medium-grained.
Sandsteen, golwende lagies swart, skalieagtige sandsteen en vuil- vaal, middel tot grofkorrelrige lae; onderste 22 dm. massief, vaalswart, middelkorrelrig	9	5	379	6	Sandstone; wavy layers of black shaly sandstone and dirty grey, medium- to coarse-grained bands; bottom 22 in. massive, greyish-black medium-grained.
Matkool.....	6	10	386	4	Coal, dull.
Skalie, effens mikahoudend.....		5	—		Shale, slightly micaceous.
Sandsteen, swart, fynkorrelrig, gelaag	1	9	388	6	Sandstone, black, fine-grained, laminated.

BOORGAT 108 : DAARBY 1369 : BOREHOLE 108

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
			Vt. Ft.	Dm. In.	
544 B A	N.G.....	Dm. In. 4	62	8	N.S.
	Glanskool, gelaag, met enkele dun skalielagies na bo en 'n sideriethoudende lagie, van 'n halfduim in middel	—	—	—	Coal, bright, banded, with occasional thin shale bands towards top and a $\frac{1}{2}$ -in. sideritic band in middle.
	N.G.....	104	—	—	N.S.
	Glanskool, gelaag, piriethou- dend, met skalielagies ($1\frac{1}{2}$ dm.) 20 dm. van bo af en 10 dm. van onder af; kern plek-plek gebreek	57	—	—	Coal, bright, banded, pyritic with $1\frac{1}{2}$ -in. shale bands 20 in. from top and 10 in. from bottom; core broken in parts.
	N.G..... ($3\frac{1}{2}$ dm. kern verloor tussen 62 vt. 8 dm. en 80 vt. 1 dm.)	22	80	1	N.S. ($3\frac{1}{2}$ in. core lost between 62 ft. 8 in. and 80 ft. 1 in.).
545 A	N.G.....	3	89	3	N.S.
	Glanskool, gelaag, skaliëagtig in middel en sideriethou- dend na onder	16	—	—	Coal, bright, banded, shaly in middle and sideritic towards bottom.
	Glanskool, gelaag, en sideriet	4	—	—	Coal, bright, banded, and siderite.
	Glanskool, gelaag, piriethou- dend, met $\frac{1}{2}$ dm. skalie 8 dm. van bo af	29	93	4	Coal, bright, banded, pyritic, with $\frac{1}{2}$ in. shale 8 in. from top.
546 D C B A	N.G.....	308	156	8	N.S.
	Glanskool, gelaag, plek-plek skaliëagtig, piriethoudend	21	—	—	Coal, bright, banded, shaly in places, pyritic.
	N.G.....	256	179	9	N.S.
	Glanskool, gelaag, met drie skalielagies (2 dm., $1\frac{1}{2}$ dm., en 1 dm.)	30	—	—	Coal, bright, banded, with three shale bands (2 in., $1\frac{1}{2}$ in., and 1 in.).
	N.G..... (9 dm. kern verloor tussen 179 vt. 9 dm. en 186 vt. 4 dm.)	40	186	4	N.S. (9 in. core lost between 179 ft. 9 in. and 186 ft. 4 in.).
	N.G.....	765	250	1	N.S.
	Steenkool; hoofsaaklik mat- kool met 7 dm. koolstof- houdende skalie en minder- waardige steenkool 26 dm. van bo af	41	—	—	Coal; mainly dull coal with 7 in. carbonaceous shale and inferior coal 26 in. from top.
	N.G.....	5	—	—	N.S.
	Glanskool, gelaag, piriethou- dend, met $1\frac{1}{2}$ dm. koolstof- houdende skalie 13 dm. van bo af; 2 dm. vaal skalie 10 dm. van onder af uitgesluit	40	257	3	Coal, bright, banded, pyritic, with $1\frac{1}{2}$ in. carbonaceous shale 13 in. from top; 2 in. grey shale 10 in. from bottom excluded.
547 E	N.G.....	27	300	10	N.S.
	Steenkool; hoofsaaklik mat- kool; meer glansend in middel, met 6 dm. minder- waardige steenkool 20 dm. van bo af, kalsiethoudend	58	—	—	Coal; mainly dull coal; brighter in middle, with 6 in. inferior coal 20 in. from top, calcitic.
	Steenkool; hoofsaaklik mat- kool; meer glansend by onderent	—	—	—	Coal; mainly dull coal; brighter at bottom.
	N.G.....	8	—	—	N.S.

Bg. 108 (verv.)

B.H. 108 (contd.)

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth	Nature of strata	
		Dm. In.	Vt. Ft.	Dm. In.	
D	Steenkool; hoofsaaklik matkool; piriethoudend, met 2 dm. minderwaardige steenkool 20 dm. van onder af	—	—	—	Coal; mainly dull coal; pyritic, with 2 in. inferior coal 20 in. from bottom.
C	N.G..... Steenkool; hoofsaaklik matkool	5 48	—	—	N.S. Coal; mainly dull coal.
B	Matkool, meer glansend na onder, met 'n skalieagtige lagie (3 dm.) 3 dm. van onder af, piriethoudend	64	—	—	Coal, dull, brighter towards bottom, with a 3-in. shaly band 3 in. from bottom, pyritic.
A	Glanskool, gelaag, piriethoudend (3 dm. kern verloor tussen 300 vt. 10 dm. en 324 vt. 6 dm.)	23	324	6	Coal, bright, banded, pyritic (3 in. core lost between 300 ft. 10 in. and 324 ft. 6 in.).
R 548	N.G..... Matkool, met 'n skalieagtige lagie (2 dm.) 7 dm. van onder af	5 50	336	2	N.S. Coal, dull, with a 2-in. shaly band 7 in. from bottom.
D	Steenkool, glansend by ente en dof in middel, plek-plek minderwaardig	19	—	—	Coal, bright at ends and dull in middle, inferior in parts.
	Matkool met 'n minderwaardige voorkoms, piriethoudend	38	—	—	Coal, dull, inferior-looking, pyritic.
C	Steenkool; hoofsaaklik matkool met 'n skalieagtige kalsiethoudende lagie (1½ dm.) in middel	18	—	—	Coal; mainly dull coal with a 1½-in. shaly, calcitic band in middle.
B	Steenkool, gemeng; hoofsaaklik matkool; piriethoudend	36	349	7	Coal, mixed; mainly dull coal; pyritic.
	N.G.....	359	379	6	N.S.
A	Matkool.....	82	386	4	Coal, dull.

No. van B.N.I.-monster F.R.I. sample no.	DIKTE (Dm.) THICKNESS (In.)		RU-STEENKOOI RAW COAL						WASTOETS WASHING TEST		DROYTOEF FLOAT						SINK- STOF SINK	
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syer Swel- ling number	Groot- te (Dm.) Size (In.)	S.G.	Op- brengs Yield %	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syer Swel- ling number	As Ash %
R 544 B	—	23	—	—	20.4	—	—	—	—1	1.45	71.8	—	3.0	16.1	34.5	46.4	3½	31.4
A	104	57	—	—	22.5	—	—	—	—1	1.45	68.6	—	2.9	13.0	33.4	50.7	3½	43.2
R 545 A	132	49	—	—	24.1	—	—	—	—1	1.45	49.4	—	2.8	13.5	34.5	49.2	3	34.4
R 546 D	760	21	—	2.3	25.0	31.8	40.9	1½	—	—	—	—	—	—	—	—	—	—
C	256	30	—	—	29.6	—	—	—	—1	1.45	44.4	—	2.8	13.0	35.3	48.9	3	42.9
B	805	41	—	2.2	28.2	25.2	44.4	F	—1	1.58	51.2	—	—	—	—	—	—	—
A	— 5	40	—	—	19.7	—	—	—	—1	1.45	65.6	—	2.8	8.1	37.3	51.8	2½	41.9
R 547 E	523	74	—	—	11.5	—	—	—	—1	1.58	90.4	13.1	3.3	8.7	20.5	67.5	P	37.5
D	— 8	59	—	—	21.9	—	—	—	—1	1.58	65.9	11.8	2.8	15.6	22.5	59.1	P	34.2
C	— 5	48	—	—	18.3	—	—	—	—1	1.58	82.1	12.1	3.0	14.6	22.0	60.4	P	35.3
B	—	64	—	—	24.5	—	—	—	—1	1.58	60.5	11.9	2.8	15.8	23.4	58.0	P	37.8
A	—	23	—	—	13.9	—	—	—	—1	1.35	53.5	14.0	2.5	4.6	34.3	58.6	1½	—
										1.35—	28.0	12.4	2.7	13.1	24.9	59.3	P	42.1
										1.58	—	—	—	—	—	—	—	—
										1.58*	81.5*	13.5*	2.6*	7.5*	31.1*	58.8*	—	—
R 548 D	140	69	—	—	20.2	—	—	—	—1	1.58	70.3	12.3	2.6	14.2	23.1	60.1	P	34.3
C	—	56	—	—	19.0	—	—	—	—1	—	76.4	12.3	2.5	14.0	22.9	60.6	P	35.2
B	—	36	—	—	14.2	—	—	—	—1	1.58	89.5	12.9	2.5	10.6	26.2	60.7	P	44.6
A	359	82	—	—	19.4	—	—	—	—1	1.58	79.6	12.2	2.3	15.5	24.2	58.0	14g	34.7

* Bereken / Calculated.

BOORGAT 109 : GROOTESTRYD 1357 : BOREHOLE 109

Kern $3\frac{1}{2}$ dm.Core $3\frac{1}{2}$ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Grond.....	2	0	—	—	Soil.
Oppervlakkalksteen.....	10	0	—	—	Surface-limestone.
Sandsteen (stampboor).....	4	6	16	6	Sandstone (jump-drill).
Sandsteen, fynkorrelrig, fyngelaag, erg verweer	12	0	—	—	Sandstone, fine-grained, lamina- ted, much weathered.
Grintsteen.....		10	—	—	Grit.
Sandsteen, fyn- tot middelkorrel- rig, wit, taamlik massief, effens kruisgelaag; onderste 6 vt. goed fyngelaag	26	0	—	—	Sandstone, fine- to medium- grained, white, fairly massive, slightly cross-bedded; bottom 6 ft. well laminated.
Sandsteen; vuil- en witvaal, fyn- tot grofkorrelrige sandsteen- lagies en swart, sanderige skalie- lagies om die beurt	10	4 $\frac{1}{2}$	65	8 $\frac{1}{2}$	Sandstone; alternating bands of dirty grey and whitish-grey, fine- to coarse-grained sandstone and black, sandy shale.
Skalie en steenkool.....		4 $\frac{1}{2}$	—	—	Shale and coal.
Sandsteen.....		2	66	3	Sandstone.
Matkool met enkele glanskool- lagies na onder	2	8	—	—	Coal, dull, with a few bright coal- bands towards bottom.
Steenkool, gemeng, piriethoudend	1	1	—	—	Coal, mixed, pyritic.
Skalie, sanderig.....		8	70	9	Shale, sandy.
Sandsteen, vaal, gelaag, fyn- en grofkorrelrig	1	3	—	—	Sandstone, grey, laminated, fine- and coarse-grained.
Sandsteen, middel- tot grofkorrel- rig, plek-plek tussengelaag met swart sandsteen, elders wit en massief	19	0	—	—	Sandstone, medium- to coarse- grained, interbedded with black sandstone in places, otherwise white and massive.
Sandsteen; wit, veldspatiese, grof- korrelrige massiewe sandsteen met fyngelaagde, vaal tot donker- kleurige lagies	13	7	—	—	Sandstone, white, felspathic, coarse-grained, massive sand- stone with laminated grey to dark-coloured bands.
Sandsteen; vaal tot donkerkleurige lagies en swart, skalieagtige lagies om die beurt	7	5	112	0	Sandstone; grey to dark-coloured bands alternating with black, shaly bands.

BOORGAT 109 : GROOTESTRYD 1357 : BOREHOLE 109

No. van B.N.I. monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
			Vt. Ft.	Dm. In.	
R 554	N.G.....	Dm. In. 2	66	3	N.S.
A {	Matkool met enkele glans- koollagies na onder	32	—	—	Coal, dull, with a few bright coal-bands towards bottom.
	Steenkool, gemeng, piriethou- dend	13	—	—	Coal, mixed, pyritic.
	N.G..... (1 dm. kern verloor)	8	70	9	N.S. (1 in. core lost).

BOORGAT 109 : GROOTESTRYD 1357 : BOREHOLE 109

ANALISE VAN LUGGEDROOGDE STEENKOOI ANALYSIS OF AIR-DRIED COAL

No. van B.N.I.-monster F.R.I. sample no.	Dikte (Dm.) Thickness (in.)		RU-STEENKOOI RAW COAL								WASTOETS WASHING TEST		DRYESTOF FLOAT								SINK- STOF SINK	
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W.	H ₂ O	As	V.B.	V.K.	Swel- syfer Swel- ling number	Groot- te (Dm.) Size (in.)	S.G.	Op- brengs Yield	V.W. C.V.	H ₂ O	As	V.B.	V.K.	Swel- syfer Swel- ling number	As	Ash	%		
R 554 A	—	45	—	—	17.2	—	—	—	—1	1.58	83.0	12.6	2.5	13.0	24.5	60.0	14g	37.6				

BOORGAT 110 : MINNASVLAKTE 716 : BOREHOLE 110

Kern 3½ dm.

Core 3½ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sand en grond.....	55	0	—	—	Sand and soil.
Lateriet.....	15	0	70	0	Laterite.
Moddersteen (stampboor).....	90	0	160	0	Mudstone (jump-drill).
Moddersteen, vaalblou; onderste 8 vt. donkervaal tot swart; skaliegagtig na onder; boonste 18 vt. geelbruin en effens verweer	65	2	225	2	Mudstone, grey-blue; bottom 8 ft. dark grey to black; shaly towards bottom; top 18 ft. yellow - brown and slightly weathered.
Glanskool, gelaag, met baie dun skalielagies, erg kalsiethoudend	1	5	—	—	Coal, bright, banded, with many thin shale bands, very calcitic.
Skalie, donker- tot ligvaal.....	5	4	231	11	Shale, dark to light grey.
Glanskool, gelaag, effens skalie- agtig in middel, met dun skalie- lagies in boonste helfte en 5 dm. skalie 12 dm. van bo af, kalsiet- houdend	2	9	—	—	Coal, bright, banded, slightly shaly in middle, with thin shale bands in top half and 5 in. shale 12 in. from top, calcitic.
Skalie, blou tot vaalblou.....	2	9	—	—	Shale, blue to greyish-blue.
Glanskool, gelaag, effens piriet- houdend in middel; wryfvlak by onderent	1	5	—	—	Coal, bright, banded, slightly pyritic in middle; slickenside at bottom.
Skalie, swart tot donkervaal, met dun steenkoollagies	4	1	242	11	Shale, black to dark-grey, with thin coal-bands.
Glanskool, gelaag, skaliegagtig by bo- en onderent, kalsiethoudend	1	8	—	—	Coal, bright, banded, shaly at top and bottom, calcitic.
Skalie.....	—	3	—	—	Shale.
Glanskool, gelaag, kalsiethoudend en erg skaliegagtig	—	—	—	—	Coal, bright, banded, calcitic and very shaly.
Skalie.....	—	1	—	—	Shale.
Glanskool, gelaag, skaliegagtig by onderent	1	0½	246	4	Coal, bright, banded, shaly at bottom.
Skalie met 'n steenkoollagie van 2 dm.	—	10	—	—	Shale with a 2-in. coal-band.
Glanskool, gelaag.....	—	10	—	—	Coal, bright, banded.
Skalie, swart tot vaalswart; tussen- gelaagde skalie en steenkool in onderste 12 dm.	5	3	—	—	Shale, black to greyish black, interbedded shale and coal, bottom 12 in.
Skalie, swart, met heelwat lagies gemengde skalie en steenkool	9	0	—	—	Shale, black, with many bands of mixed shale and coal.
Skalie tussengelaag met steenkool, piriethoudend	1	8	263	11	Shale interbedded with coal, pyritic.
Glanskool, gelaag, plek-plek vitriet- agtig, met dun skalielagies in onderste 8 dm.	3	0	—	—	Coal, bright, banded, vitrainous in parts, with thin shale bands in bottom 8 in.
Skalie tussengelaag met glanskool; breër skalielae by bo-ent	5	3	—	—	Shale interbedded with bright coal; broader shale bands at top.
Glanskool, gelaag, plek-plek effens skaliegagtig, piriethoudend veral in onderste helfte; wryfvlakke in middel	3	0	—	—	Coal, bright, banded, slightly shaly in parts, pyritic especially in bottom half; slickensides in middle.
Skalie tussengelaag met steenkool; 'n wryfvlak by onderent	1	10	—	—	Shale interbedded with coal; slickenside at bottom.
Glanskool, gelaag, plek-plek vitriet- agtig, met 2 dm. skalie 12 dm. van bo af en 1 dm. skalie 28 dm. van bo af, kalsiethoudend; boonste 8 dm. taamlik piriet- houdend; boonste 12 dm. effens skaliegagtig	4	2	281	2	Coal, bright, banded, vitrainous in parts, with 2 in. shale 12 in. from top and 1 in. shale 28 in. from top, calcitic; top 8 in. fairly pyritic; top 12 in. slightly shaly.

Bg. 110 (verv.)

B.H. 110 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
kalie, swart, met dun steenkool- lagies en plek-plek tussengelaag- de steenkool en skalie; enkele wryfplekke kom voor	25	9	306	11	Shale, black, with thin coal-bands and interbedded coal and shale in places; occasional slicken- sides occur.
lanskool, gelaag, met 'n paar dun skalielagies; onderste 7 dm. taamlik sideriethoudend	2	6	—	—	Coal, bright, banded, with a few thin shale bands; bottom 7 in. fairly sideritic.
kalie, steenkool, en sideriet....		4	—	—	Shale, coal, and siderite.
kalie, swart, met 'n bietjie tussen- gelaagde skalie en steenkool	5	9	—	—	Shale, black, with a little inter- bedded shale and coal.
kalie tussengelaag met steenkool	1	8	—	—	Shale interbedded with coal.
lanskool, gelaag, effens piriethou- dend	1	8	—	—	Coal, bright, banded, slightly pyritic.
kalie en gelaagde glanskool....	1	0	319	11	Shale and banded bright coal.
kalie, swart.....	1	6	—	—	Shale, black.
lanskool met baie dun kalielagies		11	—	—	Coal, bright, with many thin shale bands.
kalie met 'n bietjie glanskool in onderste gedeelte	2	3	324	7	Shale, with a little bright coal in bottom portion.
steenkool tussengelaag met skalie, effens piriethoudend; boonste 10 dm. van beter gehalte	2	5	327	0	Coal interbedded with shale, slightly pyritic; top 10 in. of a better quality.
kalie en gelaagde glanskool; hoofsaaklik skalie	2	5	—	—	Shale and banded bright coal; mainly shale.
lanskool, gelaag, met enkele dun skalielagies	1	0	—	—	Coal, bright, banded, with a few thin shale bands.
kalie tussengelaag met steenkool	3	7	—	—	Shale interbedded with coal.
kalie en steenkool, erg sideriet- houdend	1	4	—	—	Shale and coal, very sideritic.
kalielae, breed, en breë glanskool- lae om die beurt	6	3	343	1	Shale bands, broad, alternating with broad bright coal-bands.
kalie, swart, en koolstofhoudende skalie met vyf steenkoollagies (1 tot 3 dm.)	6	1	—	—	Shale, black, and carbonaceous shale with five 1-in. to 3-in. coal-bands.
kalielae en steenkoollae om die beurt	2	2	—	—	Shale, bands alternating with coal- bands.
lanskool, gelaag, met baie dun skalielagies, sideriethoudend veral in onderste helfte	2	10	—	—	Coal, bright, banded, with many thin shale bands, sideritic especially in bottom half.
kalie, swart, met dun steenkool- lagies	3	6	—	—	Shale, black, with thin coal-bands.
kalielae, breed, en breë glans- koollae om die beurt	3	4	—	—	Shale bands, broad, alternating with broad bright coal-bands.
kalie, swart, met talryke wryf- vlakke	3	10	—	—	Shale, black, with numerous slickensides.
kalie en steenkool, gemeng, met skalielae, erg sideriethoudend	3	10	368	8	Shale and coal, mixed with shale bands, very sideritic.
kalie, swart, en koolstofhoudende skalie met vyf-en-dertig glans- koollagies (2 tot 8 dm.) en lagies tussengelaagde steenkool en skalie, sommige sideriethou- dend; baie kwartskorrels kom voor in 'n deel (21 dm.) 31 vt. van bo af	73	10	—	—	Shale, black and carbonaceous shale with thirty-five 2-in. bright coal-bands and interbedded coal and shale, some sideritic; many quartz grains occur in a 21-in. portion 31 ft. from top.
kalie, steenkoolagtig, skalieagtige steenkool en swaar matkool	9	3	—	—	Shale, coaly, shaly coal, and heavy dull coal.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	<i>Vt.</i> <i>Ft.</i>	<i>Dm.</i> <i>In.</i>	<i>Vt.</i> <i>Ft.</i>	<i>Dm.</i> <i>In.</i>	
Skalie, koolstofhoudend, en steenkoolagtige skalie met 'n bietjie skalieagtige steenkool en glanskool	6	2	457	11	Shale, carbonaceous, and coal shale with a little shaly coal and bright coal.
Sandsteen, baie fynkorrelrig, swart, fyngelaag; onderste 18 dm. vaalbruin; skalieagtig na bo	3	8	—	—	Sandstone, very fine-grained black, laminated; bottom 18 in. greyish-brown; shaly towards top.
Sandsteen, fyn- tot grofkorrelrig, vuil- tot donkervaal, effens veldspaties na onder	5	2	466	11	Sandstone, fine- to coarse-grained, dirty to dark grey, slightly felspathic towards bottom.
Skalie, swart tot ligbruin.....	2	11	—	—	Shale, black to light brown.
Skalie, steenkoolagtig, skalieagtige steenkool, en koolstofhoudende skalie met 'n bietjie skalieagtige sideriethoudende glanskool	6	3	—	—	Shale, coaly, shaly coal, and carbonaceous shale with some shaly, sideritic bright coal.
Skalie, ligbruin, fossielhoudend..	2	4	—	—	Shale, light brown, fossiliferous.
Sandsteen, fyn- tot grofkorrelrig, wit en veldspaties waar grofkorrelrig en vaal tot vaalbruin waar fynkorrelrig, plek-plek fossielhoudend	1	9	—	—	Sandstone, fine- to coarse-grained, white and felspathic where coarse-grained and grey to greyish-brown where fine-grained, fossiliferous in places.
Sandsteen, wit tot vuilvaal, fyn- tot grofkorrelrig, veldspaties, plek-plek met golwende lagies	9	6	—	—	Sandstone, white to dirty grey, fine- to coarse-grained, felspathic, with wavy layers in places.
Sandsteen, fynkorrelrig, skalieagtig na onder, met talryke wryfvlakke	11	—	—	—	Sandstone, fine-grained, shaly towards bottom, with numerous slickensides.
Skalie, kleierig, vaal tot vaalbruin; onderste 14 dm. sanderig; fossielhoudend	3	5	—	—	Shale, clayey, grey to greyish brown; bottom 14 in. sandy fossiliferous.
Skalie, ligbruin in middelste 3 vt. en naby bo-ent, met 'n bietjie steenkoolagtige skalie	9	8	—	—	Shale, light brown in middle 3 ft. and near top, with a little coal shale.
Sandsteen, koolstofhoudend.....	1	—	—	—	Sandstone, carbonaceous.
Skalie, steenkoolagtig, skalieagtige steenkool, en swaar matkool	31	2	—	—	Shale, coaly, shaly coal, and heavy dull coal.
Skalie, koolstofhoudend in boonste 18 dm. en elders ligbruin; bevat verspreide kwartskorrels	4	10	—	—	Shale, carbonaceous in top 18 in. and elsewhere light brown, contains scattered quartz grains.
Sandsteenlagies, bruinswart, fynkorrelrig, met bruinswart skalieknolle en -lense om die beurt met ligbruin tot bruinswart skalielagies; bevat verspreide kwartskorrels	2	5	—	—	Sandstone bands, brownish-black fine-grained, with brownish-black shale nodules and lenses alternating with light brown to brownish-black shale bands, contains scattered quartz grains.
Sandsteen, fyn- tot middelkorrelrig, vaal tot wit, veldspaties	6	0	—	—	Sandstone, fine- to medium-grained, grey to white, felspathic.
Skalielae, swart, en donkervaal, fynkorrelrige sandsteenlae om die beurt	3	11	—	—	Shale bands, black, alternating with dark grey, fine-grained sandstone bands.
Sandsteen, wit tot vuilvaal, fynkorrelrig, plek-plek middelkorrelrig	21	0	575	1	Sandstone, white to dirty grey, fine-grained, medium-grained in parts.
Matkool, glansend by bo-ent, erg piriethoudend	2	1	—	—	Coal, dull, lustrous at top, very pyritic.
Steenkool, gemeng; hoofsaaklik matkool; erg piriethoudend	1	10	—	—	Coal, mixed; mainly dull coal very pyritic.

Bg. 110 (verv.)

B.H. 110 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
steenkool, gemeng; hoofsaaklik glanskool in middelste 10 dm.; effens piriethoudend	2	2	581	5	Coal, mixed; mainly bright coal in middle 10 in.; slightly pyritic.
andsteen, fynkorrelrig, fyngelaag, vaalswart, donkervaal, en vuilwit, skalieagtig na onder; golwende lae in boonste helfte	11	3	—	—	Sandstone, fine-grained, laminated, greyish-black, dark grey, and dirty white, shaly towards bottom; wavy layers in top half.
andsteen, vuilvaal, grofkorrelrig; onderste 3 dm. koolstofhoudend	1	9	594	5	Sandstone, dirty grey, coarse-grained; bottom 3 in. carbonaceous.
skalie, koolstofhoudend, steenkoolagtige skalie, en gemengde steenkool	1	8	—	—	Shale, carbonaceous, coaly shale, and mixed coal.
andsteen, koolstofhoudend.....		4	—	—	Sandstone, carbonaceous.
skalie, swart, koolstofhoudende	4	2	—	—	Shale, black, carbonaceous shale, coaly shale, and mixed coal.
skalie, steenkoolagtige skalie, en gemengde steenkool					
glanskool met 'n bietjie gemengde steenkool veral in onderste helfte	3	3	—	—	Coal, dull, with a little mixed coal especially in bottom half.
steenkool, gemeng, met piriethoudende lagie (1 dm.) 1 dm. van bo af en 18 dm. van bo af; 1 dm. skalie 6 dm. van onder af	2	9	607	2	Coal, mixed, with 1-in. pyritic bands 1 in. from top and 18 in. from top; 1 in. shale 6 in. from bottom.
andsteen, erg skalieagtig, swart tot bruinswart; onderste gedeelte bevat 'n bietjie sanderige skalie met growwerkorrelrige, dun sandsteenlagies	14	4	—	—	Sandstone, very fine-grained, black to brownish-black; bottom portion contains some sandy shale with coarser-grained, thin sandstone bands.
andsteenlagies, vuil- tot swartvaal, fyn- tot middelkorrelrig, golwend tussengelaag met swart, sanderige skalie	2	6	—	—	Sandstone bands, dirty grey to blackish-grey, fine- to medium-grained, interbedded in wavy layers with black, sandy shale.
andsteen, witterig, taamluk massief, veldspaties, fyn- tot grofkorrelrig, met enkele fynkorrelrige dun sandsteenlagies	55	5	679	5	Sandstone, whitish, fairly massive, felspathic, fine- to coarse-grained, with occasional fine-grained thin sandstone bands

BOORGAT 110 : MINNASVLAKTE 716 : BOREHOLE 110

No. van B.N.I.-monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
			Vt. Ft.	Dm. In.	
632 B	N.G.....	Dm. 64	231	11	N.S.
	Glanskool, gelaag, effens skalieagtig in middel, met dun skalielagies in boonste helfte, kalsiethoudend; 5 dm. skalie 12 dm. van bo af uitgesluit	33	—	—	Coal, bright, banded, slightly shaly in middle, with thin shale bands in top half, calcitic; 5 in. shale 12 in. from top excluded.
A	N.G.....	99	—	—	N.S.
	Glanskool, gelaag, skalieagtig by bo- en onderent, kalsiethoudend	20	—	—	Coal, bright, banded, shaly at top and bottom, calcitic.
	Skalie.....	3	—	—	Shale.
	Glanskool, gelaag, kalsiethoudend en erg skalieagtig	4½	—	—	Coal, bright, banded, calcitic and very shaly.
	Skalie.....	1	—	—	Shale.
	Glanskool, gelaag, skalieagtig by onderent	12½	246	4	Coal, bright, banded, shaly at bottom.

Bg. 110 (verv.)

B.H. 110 (contd.)

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
		Dm. In.	Vt. Ft.	Dm. In.	
R 633 C	N.G.....	20	263	11	N.S.
	Glanskool, gelaag, plek-plek vitrietagtig, effens kalsiethoudend, met dun skaliegies in onderste 8 dm.	36	—		Coal, bright, banded, vitrainous in parts, slightly calcitic, with thin shale bands in bottom 8 in.
	N.G.....	63	—		N.S.
B	Glanskool, gelaag, plek-plek effens skaliegagtig, priethoudend veral in onderste helfte; wryfvlakke in middel	36	—		Coal, bright, banded, slightly shaly in parts, pyritic especially in bottom half slickensides in middle.
A	N.G.....	22	—		N.S.
	Glanskool, gelaag, plek-plek vitrietagtig, met 2 dm. skalie 12 dm. van bo af en 1 dm. skalie 28 dm. van bo af, kalsiethoudend; boonste 8 dm. taamlik priethoudend en boonste 12 dm. effens skaliegagtig	50	281	2	Coal, bright, banded, vitrainous in parts, with 2 in. shale 12 in. from top and 1 in. shale 28 in. from top calcitic; top 8 in. rather pyritic and top 12 in. slightly shaly.
R 634 C	N.G.....	309	306	11	N.S.
	Glanskool, gelaag, met 'n paar dun skaliegies; onderste 7 dm. taamlik sideriethoudend	30	—		Coal, bright, banded, with a few thin shale bands; bottom 7 in. fairly sideritic.
	N.G.....	93	—		N.S.
B	Glanskool, gelaag, effens priethoudend (1 dm. kern verloor)	20	—		Coal, bright, banded, slightly pyritic (1 in. core lost).
A	N.G.....	68	—		N.S.
	Steenkool tussengelaag met skalie, effens priethoudend; boonste 10 dm. van beter gehalte	29	327	0	Coal interbedded with shaly slightly pyritic; top 10 in. of better quality.
R 635 E	N.G.....	252	575	1	N.S.
	Matkool, glansend by bo-ent, erg priethoudend	25	—		Coal, dull, lustrous at top, very pyritic.
	D	Steenkool, gemeng; hoofsaaklik matkool; erg priethoudend	22	—	
C	Steenkool, gemeng; hoofsaaklik glanskool in middelste 10 dm.; effens priethoudend (3 dm. kern verloor tussen 575 vt. 1 dm. en 581 vt. 5 dm.)	26	581	5	Coal, mixed; mainly bright coal in middle 10 in.; slightly pyritic (3 in. core lost between 575 ft. 1 in. and 581 ft. 5 in.).
B	N.G.....	156	594	5	N.S.
	N.G.....	74	—		N.S.
	Matkool, met 'n bietjie gemengde steenkool veral in onderste helfte	39	—		Coal, dull, with a little mixed coal especially in bottom half.
A	Steenkool, gemeng, met priethoudende lagies (1 dm.) 1 dm. van bo af en 18 dm. van onder af (7 dm. kern verloor tussen 594 vt. 5 dm. en 607 vt. 2 dm.)	33	607	2	Coal, mixed, with 1-in. pyritic bands 1 in. from top and 18 in. from top; 1 in. shaly 6 in. from bottom (7 in. core lost between 594 ft. 5 in. and 607 ft. 2 in.).

No. van B.N.I.-monster F.R.I. sample no.	DIKTE (Dm.) THICKNESS (In.)		RU-STEENKOOI RAW COAL						WASTOETS WASHING TEST		DRY-STOP FLOAT						SINK- STOP SINK		
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	Groot- te (Dm.) Size (In.)	S.G.	Op- brengs Yield %	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	As Ash %	%
R 632 B	5	28	—	—	26.3	—	—	—	—1	1.45	49.0	—	2.9	17.6	34.2	45.3	2½	34.7	
	99	41	—	—	27.7	—	—	—	—1	1.45	57.4	—	2.8	16.8	35.0	45.4	3	42.3	
R 633 C	211	36	—	—	18.5	—	—	—	—1	1.45	72.4	12.3	3.0	13.6	35.8	47.6	2½	31.6	
	63	36	—	—	23.9	—	—	—	—1	1.45	50.0	12.4	2.9	13.6	34.5	49.0	2	34.2	
R 634 C	22	50	—	—	20.8	—	—	—	—1	1.45	74.1	12.3	3.0	13.2	34.1	49.7	2½	42.5	
	309	30	—	—	23.6	—	—	—	—1	1.45	53.1	11.9	2.6	15.6	35.2	46.6	2½	32.6	
R 635 E	93	20	—	—	18.3	—	—	—	—1	1.45	67.6	12.4	3.0	12.9	34.9	49.2	2½	29.6	
	68	29	—	—	32.9	—	—	—	—1	1.45	26.4	—	—	—	—	—	—	—	
R 635 D	2,959	25	—	—	30.8	—	—	—	—1	1.58	60.0	11.4	2.6	19.2	20.0	58.2	P	48.2	
	—	22	—	—	30.6	—	—	—	—1	1.58	50.0	—	—	—	—	—	—	—	
R 635 C	—	26	—	—	19.2	—	—	—	—1	1.45	41.3	11.4	2.5	19.2	23.6	54.7	P	35.0	
	—	—	—	—	—	—	—	—	—1	1.58	82.6*	12.0*	2.5*	15.9*	26.6*	55.0*	—	—	
B	230	39	—	—	21.3	—	—	—	—1	1.58	73.0	12.2	2.4	14.9	27.0	55.7	P	38.7	
	—	33	—	—	27.4	—	—	—	—1	1.45	50.0	13.0	2.5	10.8	32.1	54.6	1½	—	
A	—	—	—	—	—	—	—	—	—1	1.45	14.3	11.0	2.0	22.7	28.0	47.3	P	52.5	
	—	—	—	—	—	—	—	—	—1	1.58	64.3*	12.6*	2.4*	13.4*	31.2*	53.0*	—	—	

* Bereken / Calculated.

BOORGAT 111 : ELANDSBOSCH 714 : BOREHOLE 111

Kern 3½ dm.

Core 3½ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sand en grond.....	80	0	80	0	Sand and soil.
Oppervlakkalksteen.....	8	0	88	0	Surface-limestone.
Moddersteen, plek-plek sjokolade- bruin; formasie baie sag, gevolg- lik geen kernwins nie	132	0	220	0	Mudstone, chocolate-brown in parts; formation very soft consequently no core recovered.
Moddersteen, donkervaal en geel- bruin, met enkele kalsietare; tekens van verwerking is opge- merk	4	0	224	0	Mudstone, dark grey and yellowish-brown, with occasi- onal calcite veins; signs of weathering were noticed.
Moddersteen, vaalblou, met skuins nate; onderste 2 vt. swart en skalieagtig	123	0	347	9	Mudstone, grey-blue, with incline oints; bottom 2 ft. black and shaly.
Glanskool, gelaag, skalieagtig....	1	3	—	—	Coal, bright, banded, shaly.
Skalie, vaalblou en swart.....	5	5	354	5	Shale, greyish-blue and black.
Glanskool, gelaag, piriethoudend.	1	0	—	—	Coal, bright, banded, pyritic.
Skalie, vaalblou en swart, met 'n steenkoolagie van 6 dm.	3	9	—	—	Shale, greyish-blue and black, with a 6-in. coal-band.
Glanskool, gelaag, effens skalie- agtig	1	4	—	—	Coal, bright, banded, slightly shaly.
Skalie, swart, met 'n dun steen- koolagie	2	10	—	—	Shale, black, with a thin coal band.
Skalie en steenkool, gemeng.....		3	—	—	Shale and coal, mixed.
Glanskool, gelaag; onderste 2 dm. effens skalieagtig; wryfvlak naby onderent	1	7	365	2	Coal, bright, banded; bottom 2 in. slightly shaly; slickenside near bottom.
Skalie, swart, met 12 dm. gemeng- de steenkool en skalie 12 dm. van bo af en 'n soortgelyke laag (13 dm.) 30 dm. van bo af	11	6	—	—	Shale, black, with 12 in. mixed coal and shale 12 in. from top and a similar 13-in. band 30 in. from top.
Skalie en steenkool, fyngelaag....	2	0	378	8	Shale and coal, laminated.
Glanskool, gelaag; kern erg ge- breek en effens piriethoudend (2 dm. kern te veel)	2	10	381	4	Coal, bright, banded; core badly broken and slightly pyritic (2 in. core in excess).
Skalie, swart.....	1	5	—	—	Shale, black.
Skalie en steenkool, gemeng, met 'n paar skalielagies; wryfvlak naby onderent	3	5	—	—	Shale and coal, mixed, with a few shale bands; slickenside near bottom.
Glanskool, gelaag, met 'n paar dun skalielagies; wryfvlak by onder- ent	1	4	—	—	Coal, bright, banded, with a few thin shale bands; slickenside bottom.
Glanskool, gelaag, met 'n paar dun skalielagies; wryfvlak by onder- ent	1	6	—	—	Coal, bright, banded, with a few thin shale bands; slickenside bottom.
Skalie en steenkool, gemeng; wryf- vlak by onderent	1	6	—	—	Shale and coal, mixed; slickenside at bottom.
Glanskool, gelaag, plek-plek vitriet- agtig, met 'n skalielagie (2 dm.) 10 dm. van bo af en 'n wryfvlak by onderent van lagie; enkele skalielagies in onderste 12 dm.	2	10	—	—	Coal, bright, banded, vitrainous parts, with a 2-in. shale band 10 in. from top and a slicken- side at bottom of band; a few shale bands in bottom 12 in.
Glanskool, gelaag, erg glansend..	2	1	—	—	Coal, very bright, banded.
Skalie en gemengde steenkool en skalie		7	—	—	Shale and mixed coal and shale.
Glanskool, gelaag, effens piriethou- dend (11 dm. kern verloor)	2	5	399	4	Coal, bright, banded, slightly pyritic (11 in. core lost).
Skalie, swart.....	2	1	401	5	Shale, black.

Bg. 111 (verv.)

B.H. 111 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
anskool, gelaag; boonste 6 dm. skalieagtig; twee dun skalielagies in onderste helfte en 2 dm. skalie 6 dm. van bo af; kalsiethoudend alie, swart, met 3 dm. steenkool in middel	2	0	—	—	Coal, bright, banded; top 6 in. shaly; two thin shale bands in bottom half and 2 in. shale 6 in. from top; calcitic.
anskool, gelaag, plek-plek vitrietagtig	6	4	409	9	Shale, black, with 3 in. coal in middle.
alie met 'n bietjie steenkool, erg sideriethoudend	1	6	—	—	Coal, bright, banded, vitrainous in parts.
anskool, gelaag, met 2 dm. skalieagtige steenkool 7 dm. van bo af; onderste 5 dm. erg skalieagtig en piriethoudend; wryfvlak by onderent	3	—	—	—	Shale with a little coal, very sideritic.
anskool, gelaag, met 2 dm. skalieagtige steenkool 7 dm. van bo af; onderste 5 dm. erg skalieagtig en piriethoudend; wryfvlak by onderent	2	3	—	—	Coal, bright, banded, with 2 in. shaly coal 7 in. from top; bottom 5 in. very shaly and pyritic; slickenside at bottom.
anskool, gelaag, met ½ dm. skalie 15 dm. van bo af; wryfvlakke aan weerskante van skalielagie; siderietkorrels in onderste 18 dm.	4	9	—	—	Coal, bright, banded, with ½ in. shale 15 in. from top; slickensides on both sides of shale band; siderite pellets in bottom 18 in.
alie en steenkool, gemeng.	5	—	—	—	Shale and coal, mixed.
alie, koolstofhoudend.	1	0	—	—	Shale, carbonaceous.
anskool, gelaag, met baie dun skalielagies	1	4	—	—	Coal, bright, banded, with many thin shale bands.
alie.	1	0	—	—	Shale.
anskool, gelaag, plek-plek erg glansend, effens sideriethoudend naby onderent; 'n skalieagtige lagie van 1 dm. naby onderent (6 dm. kern verloor tussen 409 vt. 9 dm. en 424 vt. 3 dm.)	1	6	424	3	Coal, bright, banded, very bright in parts, slightly sideritic near bottom; a 1-in. shaly band near bottom (6 in. core lost between 409 ft. 9 in. and 424 ft. 3 in.).
alie, swart, met drie steenkool-lagies (3 tot 5 dm.); onderste 18 dm. gesny deur wryfvlakke	3	6	—	—	Shale, black, with three 3-in. to 5-in. coal bands; bottom 18 in. cut by slickensides.
anskool met fyn lagies skalie; onderste 4 dm. gesny deur wryfvlakke	1	10	429	7	Coal, bright, with fine shale bands; bottom 4 in. cut by slickensides.
alie en gelaagde glanskool, gemeng, met 'n paar skalie-lagies; erg gesny deur wryfvlakke oor hele dikte	8	0	—	—	Shale and banded bright coal, mixed, with a few shale bands; extensively cut by slickensides through entire thickness.
alie met elf lagies (4 tot 9 dm.) gemengde steenkool en skalie ndsteen, massief, middelkorrelig tot grinterig, veldspaties, wit; oorgang vanaf boliggende skalie besonder skerp	18	5	456	0	Shale with eleven 4-in. to 9-in. bands of mixed coal and shale.
ndsteen, fyngelaag, skalieagtig, vaalswart	25	6	—	—	Sandstone, massive, medium-grained to gritty, feldspathic, white; transition from overlying shale very sharp.
anskool, erg sideriethoudend, met 'n bietjie skalie	1	0	483	0	Sandstone, laminated, shaly, greyish-black.
alie, swart.	1	3	—	—	Coal, very sideritic, with a little shale.
anskool, gelaag, plek-plek vitrietagtig, effens skalieagtig by bo-ent; 'n skalielagie van 'n halfduim 4 dm. van bo af en 'n sideriethoudende lagie van 'n halfduim naby onderent	6	7	490	10	Shale, black.
	2	2	493	0	Coal, bright, banded, vitrainous in parts, slightly shaly at top; a ½-in. shale band 4 in. from top and a ½-in. sideritic band near bottom.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Skalie, swart, sanderig in onderste 3 vt., met 'n paar steenkoolagies in boonste gedeelte	8	2	501	2	Shale, black, sandy in bottom 3 ft., with a few coal-bands in top portion.
Sandsteen, fyngelaag, skalieagtig by bo-ent	2	10	—	—	Sandstone, laminated, shaly at top.
Sandsteen, middel- tot grofkorrelrig, plek-plek grinterig, wit tot vuilvaal, veldspaties, plek-plek met fynkorrelrige, donkervaa lagies	15	9	—	—	Sandstone, medium- to coarse grained, gritty in parts, white to dirty grey, felspathic, with fine-grained, dark grey bands in places.
Sandsteen, vaal, donkervaal, en vuilvaal, middel- tot grofkorrelrig	5	6	—	—	Sandstone, grey, dark grey, and dirty grey, middle- to coarse grained.
Sandsteen, swart en skalieagtig..	2	8	528	0	Sandstone, black and shaly.
Skalie, swart en koolstofhoudend.	16	4	544	4	Shale, black and carbonaceous.
Skalie, steenkoolagtig.....	2	1	—	—	Shale, coaly.
Matkool, swaar.....	1	0	—	—	Coal, dull, heavy.
Matkool en skalieagtige steenkool	1	3	—	—	Coal, dull, and shaly coal.
Skalie, steenkoolagtig, skalieagtige steenkool, en koolstofhoudende skalie met enkele glanskoolagies	10	8	559	6	Shale, coaly, shaly coal, and carbonaceous shale with occasional bright coal-bands.
Skalie, swart, en koolstofhoudende skalie met 'n bietjie steenkoolagtige skalie en skalieagtige steenkool	6	11	—	—	Shale, black and carbonaceous shale with a little coaly shaly and shaly coal.
Sandsteen, vuilvaal, middelkorrelrig	1	8	—	—	Sandstone, dirty grey, medium grained.
Skalie, swart en sanderig by bo-ent, bruin en kleierig by onder-ent	1	11	570	0	Shale, black and sandy at top, brown and clayey at bottom.
Matkool.....		11	—	—	Coal, dull.
Glanskool, gelaag, erg kalsiet-, piriet-, en sideriethoudend	1	5	—	—	Coal, bright, banded, very calcitic, pyritic, and sideritic.
Skalie, swart, en koolstofhoudende skalie	13	8	—	—	Shale, black, and carbonaceous shale.
Skalie, steenkoolagtig, en skalieagtige steenkool	4	2	—	—	Shale, coaly, and shaly coal.
Skalie, swart, en koolstofhoudende skalie met 'n bietjie piriethoudende glanskool; enkele wryfvlakke na onder	6	2	596	4	Shale, black, and carbonaceous shale with a little pyritic bright coal; a few slickensides towards bottom.
Skalie, swart, en koolstofhoudende skalie met 'n bietjie steenkoolagtige skalie en skalieagtige steenkool; wryfvlakke veral na onder, waar lae erg gebreek is	16	3	—	—	Shale, black, and carbonaceous shale with a little coaly shaly and shaly coal; slickensides especially towards bottom where beds are extensively broken.
Skalie, swart, effens sanderig, met baie wryfvlakke	4	4	—	—	Shale, black, slightly sandy with numerous slickensides.
Sandsteen, baie fynkorrelrig, swart, swartbruin na onder	3	1	621	7	Sandstone, very fine-grained, black, blackish-brown towards bottom.
Sandsteen, baie fynkorrelrig, effens fyngelaag, mikahoudend, ligbruin	6	8	—	—	Sandstone, very fine-grained, slightly laminated, micaceous, light brown.
Sandsteen, massief, witterig, vale- rig, en bruinerig, baie fynkorrel- rig, effens mikahoudend	4	0	—	—	Sandstone, massive, whitish, greyish, and brownish, very fine grained, slightly micaceous.

Bg. 111 (verv.)

B.H. 111 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sandsteen, massief, wit tot vaal, grofkorrelrig tot grinterig, veldspaties	6	4	—	—	Sandstone, massive, white to grey, coarse-grained to gritty, felspathic.
Sandsteen, wit, vaalwit, massief, veldspaties, fyn- tot middelkorrelrig, plek-plek grinterig	17	10	—	—	Sandstone, white, greyish-white, massive, felspathic, fine- to medium-grained, gritty in parts.
Sandsteen, vaal tot vaalwit, grofkorrelrig tot grinterig, massief, veldspaties	5	0	—	—	Sandstone, grey to greyish-white, coarse-grained to gritty, massive, felspathic.
Sandsteen, wit en vaal, middel- tot grofkorrelrig, massief, veldspaties	7	2	—	—	Sandstone, white and grey, medium- to coarse-grained, massive, felspathic.
Sideriet met 'n bietjie steenkool.	2	—	—	—	Siderite with a little coal.
Sandsteen, vaal, grofkorrelrig tot grinterig, massief, veldspaties	9	2	677	11	Sandstone, grey, coarse-grained to gritty, massive, felspathic.
Matkool met enkele glanskool-aartjies en 'n piriethoudende lagie van 'n halfduim 8 dm. van bo af	3	6	—	—	Coal, dull, with a few bright coal-stringers and a $\frac{1}{2}$ -in. pyritic band 8 in. from top.
Steenkool; boonste helfte glansende matkool en onderste helfte gelaagde glanskool; 'n piriethoudende lagie van 'n halfduim $3\frac{1}{2}$ dm. van onder af; boonste 2 dm. piriethoudend	2	8	684	1	Coal; top half lustrous, dull coal and bottom half banded bright coal; a $\frac{1}{2}$ -in. pyritic band $3\frac{1}{2}$ in. from bottom; top 2 in. pyritic and sideritic.
Steenkool, erg sideriethoudend...	2	—	—	—	Coal, very sideritic.
Sandsteen; baie fynkorrelrige fyn-gelaagde, mikahoudende, golwende lagies vaal, swart, en bruinswart sandsteen	9	7	693	10	Sandstone; very fine-grained, laminated, micaceous, wavy layers of grey, black, and brownish-black sandstone.
Matkool met 'n piriethknol $5\frac{1}{2}$ dm. van bo af	2	0	—	—	Coal, dull, with a pyrite nodule $5\frac{1}{2}$ in. from top.
Skalie, koolstofhoudend, en skalieagtige steenkool, piriethoudend	1	1	—	—	Shale, carbonaceous, and shaly coal, pyritic.
Steenkool, gemeng, met 1 dm. skalie 27 dm. van bo af en 2 dm. skalie 35 dm. van bo af	5	2	—	—	Coal, mixed, with 1 in. shale 27 in. from top and 2 in. shale 35 in. from top.
Piriethoudende laag.....	4	—	—	—	Pyritic band.
Glanskool, gelaag, met 'n bietjie matkool, kalsiethoudend	3	6	—	—	Coal, bright, banded, with some dull coal, calcitic.
Steenkool, gemeng; hoofsaaklik matkool met 'n bietjie glansende matkool en 'n piriethknol 25 dm. van bo af; onderste 9 dm. erg sideriet- en kalsiethoudend	3	4	—	—	Coal, mixed; mainly dull coal with a little lustrous dull coal and a pyrite nodule 25 in. from top; bottom 9 in. very sideritic and calcitic.
Glanskool, gelaag, met 'n bietjie matkool; 'n piriethlagie van 'n halfduim 8 dm. van bo af en 'n skalieagtige lagie van 'n halfduim 23 dm. van bo af	2	2	712	3	Coal, bright, banded, with a little dull coal; a $\frac{1}{2}$ -in. pyrite layer 8 in. from top and a $\frac{1}{2}$ -in. shaly layer 23 in. from top.
Skalie, swart, effens sanderig, met verspreide kwartskorrels en dun, swarterige sandsteenlagies in onderste helfte	7	8	—	—	Shale, black, slightly sandy, with scattered quartz grains and thin, blackish sandstone bands in bottom half.
Sandsteen, swart, grofkorrelrig, met golwende skalieagtige lagies	1	0	—	—	Sandstone, black, coarse-grained, with wavy, shaly layers.
Sandsteen, vaal grofkorrelrig, veldspaties	1	8	722	7	Sandstone, grey, coarse-grained, felspathic.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Skalie met 'n bietjie steenkool- agtige skalie naby bo-ent	4	10	726	7	Shale with a little coaly shale near top.
Sandsteen, fyngelaag, baie fyn- korrelrig, mikahoudend, swart, bruinswart, en vaalswart	4	6	—	—	Sandstone, laminated, very fine- grained, micaceous, black, brownish-black, and greyish- black.
Sandsteen, fyn- tot grofkorrelrig, veldspaties, wit, taamlik massief, met koolstofhoudende strepies deur hele dikte; 'n konglome- raatagtige lagie (3 dm.) 12 dm. van onder af	16	5	747	6	Sandstone, fine- to coarse-grained, felspathic, white, fairly massive, with carbonaceous streaks through entire thickness; a 3-in. conglomeratic band 12 in. from bottom.

BOORGAT 111 : ELANDSBOSCH 714 : BOREHOLE 111

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
		Dm. In.	Vt. Ft.	Dm. In.	
R 636	N.G.....	65	354	5	N.S.
C	Glanskool, gelaag, piriethou- dend	12	—	—	Coal, bright, banded, pyritic.
B	N.G.....	45	—	—	N.S.
	Glanskool, gelaag, effens skalieagtig	16	—	—	Coal, bright, banded, slightly shaly.
A	N.G.....	37	—	—	N.S.
	Glanskool, gelaag; onderste 2 dm. effens skalieagtig; wryfvlak naby onderent	19	365	2	Coal, bright, banded; bottom 2 in. slightly shaly; slicken- side near bottom.
R 637	N.G.....	24	378	8	N.S.
F	Glanskool, gelaag; kern erg gebreek en effens piriethou- dend (2 dm. kern te veel)	34	381	4	Coal, bright, banded; core badly broken and slightly pyritic (2 in. core in excess)
E	N.G.....	58	—	—	N.S.
	Glanskool, gelaag, met 'n paar dun skalielagies; wryfvlak by onderent	16	—	—	Coal, bright, banded, with a few thin shale bands; slicken- side at bottom.
D	Glanskool, gelaag, met 'n paar dun skalielagies; wryfvlak by onderent	18	—	—	Coal, bright, banded, with a few thin shale bands; slicken- side at bottom.
C	N.G.....	18	—	—	N.S.
	Glanskool, gelaag, plek-plek vitrietagtig; 'n skalielagie (2 dm.) met 'n wryfvlak by onderent 10 dm. van bo af; enkele skalielagies in onder- ste 12 dm.	34	—	—	Coal, bright, banded, vitrai- nous in parts; a 2-in. shale band with a slickenside at bottom 10 in. from top; a few shale bands in bottom 12 in.

g. 111 (verv.)

B.H. 111 (contd.)

van I.L. ster R.L. le no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
		Dm. In.	Vt. Ft.	Dm. In.	
	Glanskool, gelaag, erg glansend	25	—	—	Coal, very bright, banded.
	N.G.....	7	—	—	N.S.
	Glanskool, gelaag, effens piriethoudend (11 dm. kern verloor)	29	399	4	Coal, bright, banded, slightly pyritic (11 in. core lost).
	N.G.....	25	401	5	N.S.
	Glanskool, gelaag, met twee dun skalielagies in onderste helfte en 2 dm. skalie 6 dm. van bo af, kalsiethoudend; boonste 6 dm. skalieagtig	24	—	—	Coal, bright, banded, with two thin shale bands in bottom half and 2 in. shale 6 in. from top, calcitic; top 6 in. shaly.
	N.G.....	76	—	—	N.S.
	Glanskool, gelaag, plek-plek vitrietagtig	18	—	—	Coal, bright, banded, vitrainous in parts.
	N.G.....	3	—	—	N.S.
	Glanskool, gelaag, met 2 dm. skalieagtige steenkool 7 dm. van bo af; onderste 5 dm. erg skalieagtig en piriethoudend; wryfvlak by onderent	27	—	—	Coal, bright, banded, with 2 in. shaly coal 7 in. from top; bottom 5 in. very shaly and pyritic; slickenside at bottom.
	Glanskool, gelaag, met ½ dm. skalie 15 dm. van bo af; wryfvlakke aan weerskante van skalielagie; siderietkorrels in onderste 18 dm.	57	—	—	Coal, bright, banded, with ½ in. shale 15 in. from top; slickensides on both sides of shale band; siderite pellets in bottom 18 in.
	N.G.....	17	—	—	N.S.
	Glanskool, gelaag, met baie dun skalielagies	16	—	—	Coal, bright, banded, with many thin shale bands.
	N.G.....	12	—	—	N.S.
	Glanskool, gelaag, plek-plek erg glansend, effens sideriethoudend naby onderent; 'n skalieagtige lagie van 1 dm. naby onderent (6 dm. kern verloor tussen 409 vt. 9 dm. en 424 vt. 3 dm.)	18	424	3	Coal, bright, banded, very bright in parts, slightly sideritic near bottom; a 1-in. shaly band near bottom (6 in. core lost between 409 ft. 9 in. and 424 ft. 3 in.).
	N.G.....	42	—	—	N.S.
	Glanskool met fyn lagies skalie; onderste 4 dm. gesny deur wryfvlakke	22	429	7	Coal, bright, with fine shale bands; bottom 4 in. cut by slickensides.
	N.G.....	79	490	10	N.S.
	Glanskool, gelaag, plek-plek vitrietagtig, effens skalieagtig by bo-ent; 'n skalielagie van 'n halfduim 4 dm. van bo af en 'n siderietlagie van 'n halfduim naby onderent	26	493	0	Coal, bright, banded, vitrainous in parts, slightly shaly at top; a ½-in. shale band 4 in. from top and a ½-in. siderite band near bottom.
	N.G.....	110	677	11	N.S.
	Matkool met enkele glanskool-aartjies; 'n piriethoudende lagie van 'n halfduim 8 dm. van bo af	42	—	—	Coal, dull, with a few bright coal-stringers; a ½-in. pyritic band 8 in. from top.

Bg. 111 (verv.)

B.H. 111 (contd.)

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth	Nature of strata	
		Dm. In.	Vt. Ft.	Dm. In.	
A	Steenkool ; boonste helfte glansende matkool, onderste helfte gelaagde glanskool ; 'n piriethoudende lagie van 'n halfduim 3½ dm. van onder af ; boonste 2 dm. priet- en sideriethoudend	32	684	1	Coal; top half lustrous coal and bottom half band bright coal; a ½-in. pyrite band 3½ in. from bottom top 2 in. pyritic and sideritic
S 66	N.G.....	115	693	10	N.S.
E	Matkool met 'n prietknol 5½ dm. van bo af	24	—		Coal, dull, with a pyrite nodules 5½ in. from top.
	N.G.....	13	—		N.S.
D	Steenkool, gemeng, met 1 dm. skalie 27 dm. van bo af en 2 dm. skalie 35 dm. van bo af	62	—		Coal, mixed, with 1 in. shale 27 in. from top and 2 in. shale 35 in. from top.
	N.G.....	4	—		N.S.
C	Glanskool, gelaag, met 'n bietjie matkool, kalsiethoudend	42	—		Coal, bright, banded, with some dull coal, calcitic.
B	Steenkool, gemeng; hoofsaaklik matkool met 'n bietjie glansende matkool en 'n prietknol 25 dm. van bo af; onderste 9 dm. erg sideriet- en kalsiethoudend	40	—		Coal, mixed; mainly dull coal with a little lustrous dull coal and a pyrite nodule 25 in. from top; bottom 9 in. is sideritic and calcitic.
A	Glanskool, gelaag, met 'n bietjie matkool; 'n prietlagie van 'n halfduim 8 dm. van bo af en 'n skalieagtige lagie van 'n halfduim 23 dm. van bo af (10 dm. kern verloor)	26	712	3	Coal, bright, banded, with a little dull coal; a ½-in. pyrite layer 8 in. from top and a ½-in. shaly layer 23 in. from top (10 in. core lost).

No. van B.N.I.-monster F.R.I. sample no.	DIKTE (Dm.) THICKNESS (In.)		RU-STEENKOOL RAW COAL								WASTOETS WASHING TEST		DRY-STOP FLOAT						SINK- STOP SINK			
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. C.V. lb./lb.	H ₂ O %	As Ash %		V.B. V.M. %		V.K. F.C. %		Swel- syter Swel- ling number	Groot- te (Dm.) Size (In.)	S.G.	Op- brengs Yield %	V.W. C.V. lb./lb.	H ₂ O %	As Ash %		V.B. V.M. %	V.K. F.C. %	Swel- syter Swel- ling number	As Ash %
R 639 A	—	26	—	—	23.4	—	—	—	—	—	—	—1	1.45	55.0	12.6	3.0	11.5	35.5	50.2	2	38.0	—
S 65 B A	2,217	42	—	—	35.0	—	—	—	—	F	—	—	—	—	—	—	—	—	—	—	—	—
	—	32	—	—	29.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S 66 E	117	24	—	—	30.0	—	—	—	—	P	—	—	—	—	—	—	—	—	—	—	—	—
	—	13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
D	—	62	10.6	2.8	23.0	21.5	52.7	P	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
C	—	42	10.7	2.7	22.1	26.3	48.9	F	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B	—	40	11.0	2.7	19.8	26.8	50.7	P	—	—	—	—	—	—	—	—	—	—	—	—	—	—
A	—	26	12.9	3.0	9.6	29.1	58.3	1Ag	—	—	—	—	—	—	—	—	—	—	—	—	—	—

BOORGAT 112 : VETLEEGTE 707 : BOREHOLE 112

Kern $3\frac{1}{2}$ dm.Core $3\frac{1}{2}$ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sand.....	10	0	—	—	Sand.
Lateriet.....	7	6	—	—	Laterite.
Verweringsmateriaal (modder- steen?); klein stukkes modder- steen is in modder afkomstig van die boorgat gesien	109	6	—	—	Products of weathering (mud- stone?); pieces of mudstone were found in sludge from the borehole.
Skalie en steenkool, verweer (stampboor)	5	10	132	10	Shale and coal, weathered (jump- drill).
Skalie, swart, met dun steenkool- lagies; kern erg gebreek	22	0	154	10	Shale, black, with thin coal-bands; core extensively broken.
Skalielae, breed, en breë steenkool- lae om die beurt, erg sideriet- houdend	2	11	—	—	Shale bands, broad, alternating with broad coal-bands, very sideritic.
Skalie, swart, met baie kwarts- korrels tot 3 mm. in deursnee; wryfvlakke by onderent	7	3	165	0	Shale, black, with many quartz grains up to 3 mm. in diameter; slickensides at bottom.
Sandsteen, wit tot vaalwit, massief, veldspaties, fyn- tot grofkorrel- rig; boonste 12 dm. vaal en fyngelaag	7	8	—	—	Sandstone, white to greyish-white, massive, feldspathic, fine- to coarse-grained; top 12 in. grey and laminated.
Skalie en steenkool, gemeng; wryfvlak in middel	1	8	—	—	Shale and coal, mixed; slickenside in middle.
Skalie, koolstofhoudend, met 'n bietjie skalieagtige steenkool naby middel	3	11	—	—	Shale, carbonaceous, with a little shaly coal near middle.
Skalie, swart, en koolstofhoudende skalie met enkele steenkool- lagies; bevat baie kwartskorrels; onderste helfte erg gebreek deur talryke wryfvlakke	16	0	—	—	Shale, black, and carbonaceous shale with occasional coal- bands; contains many quartz grains; bottom half extensively cut by numerous slickensides.
Skalie, koolstofhoudend, met 'n bietjie skalieagtige matkool en enkele dun glanskoolagies; onderste 18 dm. erg gebreek deur talryke wryfvlakke	6	7	—	—	Shale, carbonaceous, with a little shaly dull coal and a few thin bright-coal-bands; bottom 18 in. extensively broken by numerous slickensides.
Sandsteen, skalieagtig, donkervaal, met baie wryfvlakke	5	—	201	3	Sandstone, shaly, dark grey, with numerous slickensides.
Skalie, swart, met baie skalieagtige steenkoolagies	6	5	—	—	Shale, black, with many bands of shaly coal.
Skalie, kleierig, bruin; swartbruin na onder	6	5	—	—	Shale, clayey, brown; blackish- brown towards bottom.
Skalie, swart, en koolstofhoudende skalie	18	8	—	—	Shale, black, and carbonaceous shale.
Skalie, kleierig, bruin.....	4	3	—	—	Shale, clayey, brown.
Sandsteen, kleierig, vaalbruin....	1	4	—	—	Sandstone, clayey, greyish-brown.
Skalie, ligbruin in boonste derde, donkerder in middel, vaalswart in onderste derde, sanderig veral na onder, plek-plek fossielhou- dend	12	4	250	8	Shale, light brown in top third, darker in middle, greyish-black in bottom third, sandy especially towards bottom, fossiliferous in parts.
Sandsteen, vuilvaal, vaalwit, en vaalbruin, fyn- tot middelkorrel- rig, met effens golwende lagies	21	10	—	—	Sandstone, dirty grey, greyish- white, and greyish-brown, fine- to medium-grained, with slightly wavy layers.
Skalie, kleierig, effens sanderig by bo- en onderent, ligbruin	1	1	—	—	Shale, clayey, slightly sandy at top and bottom, light brown.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sandsteen, fyn- tot grofkorrelrig met baie ligbruin en vaalswart kleiknolle van wisselende grootte	1	3	—	—	Sandstone, fine- to coarse-grained, with many light brown and greyish-black clay nodules of varying size.
Sandsteen, vaalswart, skalieagtig veral na bo	5	0	—	—	Sandstone, greyish-black, shaly especially towards top.
Sandsteen, fynkorrelrig, witterig en ligbruin	3	10	—	—	Sandstone, fine-grained, whitish and light brown.
Sandsteen, fyn- tot grofkorrelrig, wit, massief, veldspaties	28	6	312	2	Sandstone, fine- to coarse-grained, white, massive, feldspathic.
Matkool, piriethoudend.....		11	—	—	Coal, dull, pyritic.
Skalie, koolstofhoudend.....		11	314	0	Shale, carbonaceous.
Matkool, plek-plek swaar, met enkele glanskoolaartjies, effens piriethoudend	6	1	320	1	Coal, dull, heavy in parts, with occasional bright coal-stringers, slightly pyritic.
Steenkool, skalieagtig.....		1	—	—	Coal, shaly.
Skalie, swart, fyngelaag, en skalieagtige sandsteen	1	3	—	—	Shale, black, laminated, and shaly sandstone.
Sandsteen, baie fynkorrelrig, swart en vaalswart; golwende lagies in onderste helfte	3	3	—	—	Sandstone, very fine-grained, black to greyish-black; wavy layers in bottom half.
Sandsteen, middel- tot grofkorrelrig, effens veldspaties, vaal tot vaalwit, massief	10	9	—	—	Sandstone, medium- to coarse-grained, slightly feldspathic, grey to greyish-white, massive.
Skalie, swart, sanderig, en vaal sandsteen	1	9	337	2	Shale, black, sandy, and grey sandstone.
Steenkool, skalieagtig.....	1	11	339	1	Coal, shaly.
Matkool.....	2	3	—	—	Coal, dull.
Matkool, plek-plek swaar; boonste 5 dm. gemeng; piriethoudend en fusietagtig; ½ dm. moddersteen 6 dm. van onder af	2	2	—	—	Coal, dull, heavy in parts; top 5 in. mixed; pyritic and fusainous; ½ in. mudstone 6 in. from bottom.
Matkool; boonste- en onderste 9 dm. erg sideriet- en kalsiethoudend, met glanskoolaartjies in onderste 9 dm.	2	0	—	—	Coal, dull; top and bottom 9 in. very sideritic and calcitic, with bright coal-stringers in bottom 9 in.
Steenkool, gemeng; hoofsaaklik matkool; 4 dm. piriet 20 dm. van bo af en plek-plek skalieagtige lagies	3	11	—	—	Coal, mixed; mainly dull coal; 4 in. pyrite 20 in. from top and shaly bands in places.
Skalie.....		2½	—	—	Shale.
Steenkool, gemeng, piriethoudend, met 4 dm. piriet en steenkool 5 dm. van bo af	1	6½	351	4	Coal, mixed, pyritic, with 4 in. pyrite and coal 5 in. from top.
Sandsteen, wit, vaal, vaalbruin, en vaalswart, mikahoudend; golwende lagies op plekke	13	6	—	—	Sandstone, white, grey, greyish-brown, and greyish-black, micaceous; wavy layers in places.
Skalie, swart, sanderig, met baie kwartskorrels en dun sandsteenlagies veral na onder	7	0	—	—	Shale, black, sandy, with many quartz grains and thin sandstone bands especially towards bottom.
Skalielae, swart, sanderig, golwend gelaag, met swart, vaalswart, en vuilvaal, middelkorrelrige sandsteen	10	9	382	7	Shale bands, black, sandy, in wavy layers, with black, greyish-black, and dirty grey, medium-grained sandstone.

Bg. 112 (verv.)

B.H. 112 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Matkool met enkele glanskool-aartjies; 'n skalieagtige lagie (2 dm.) 13 dm. van ander af en nog een by onderent	3	0	385	7	Coal, dull, with occasional bright coal-stringers; a 2-in. shaly band 13 in. from bottom and another at bottom.
Skalie, swart, sanderig.....	1	3	—	—	Shale, black, sandy.
Sandsteen, fyngelaag bruinswart en vaal, plek-plek mikahoudend	4	8	391	7	Sandstone, laminated, brownish-black and grey, micaceous in parts.

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No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
		Dm. In.	Vt. Ft.	Dm. In.	
R 640 A	N.G..... Matkool, plek-plek swaar, met enkele glanskoolaartjies, effens piriethoudend	11 73	314 320	0 1	N.S. Coal, dull, heavy in parts, with occasional bright coal-stringers, slightly pyritic.
R 641 F	N.G..... Matkool.....	23 27	339 —	1 —	N.S. Coal, dull.
E	Matkool, plek-plek swaar; boonste 5 dm. gemeng; piriethoudend en fusietagtig; $\frac{1}{2}$ dm. moddersteen 6 dm. van onder af	28	—	—	Coal, dull, heavy in parts; top 5 in. mixed pyritic and fusainous; $\frac{1}{2}$ in. mudstone 6 in. from bottom.
D	Matkool; boonste en onderste 9 dm. erg sideriet- en kalsiethoudend, met glanskoolaartjies in onderste 9 dm.	24	—	—	Coal, dull; top and bottom 9 in. very sideritic and calcitic, with bright coal-stringers in bottom 9 in.
C	Steenkool, gemeng; hoofsaaklik matkool met 4 dm. piriet 20 dm. van bo af en plek-plek skalieagtige lagies	47	—	—	Coal, mixed; mainly dull coal with 4 in. pyrite 20 in. from top and shaly bands in parts.
B	N.G..... Steenkool, gemeng, piriethoudend, met 4 dm. piriet en steenkool 5 dm. van bo af	2 $\frac{1}{2}$ 18 $\frac{1}{2}$	— 351	— 4	N.S. Coal, mixed, pyritic, with 4 in. pyrite and coal 5 in. from top.
A	N.G..... Matkool met enkele glanskoolaartjies; 'n skalieagtige lagie (2 dm.) 13 dm. van onder af en nog een by onderent	375 36	382 385	7 7	N.S. Coal, dull, with occasional bright coal-stringers; a 2-in. shaly band 13 in. from bottom and another at bottom.

BOORGAT 112: VETLEGTE 707: BOREHOLE 112

ANALISE VAN LUGGEDROOGDE STEENKOOL

ANALYSIS OF AIR-DRIED COAL

No. van B.N.I.-monster F.R.I. sample no.	Dikte (Dm.) THICKNESS (IN.)		RU-STEENKOOL RAW COAL					WASTOETS WASHING TEST		DRYESTOF FLOAT						SINK- STOF SINK		
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	Groot- te (Dm.) Size (in.)	S.G.	Op- brengs Yield %	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	As Ash %
R 640 A	— 228	73	—	—	25.1	—	—	—	—1	1.58	59.9	11.5	3.5	15.6	23.5	57.4	P	39.3
R 641 F E D C	—	27	—	—	19.4	—	—	—	—1	1.58	74.5	12.1	3.6	12.6	22.5	61.3	P	39.3
	—	28	—	—	23.4	—	—	—	—1	1.58	60.4	11.6	3.5	15.9	23.4	57.2	P	35.2
	—	24	—	—	25.3	—	—	—	—1	1.58	74.4	11.3	3.3	18.0	23.2	55.5	P	47.0
	— 2½	47	—	—	23.7	—	—	—	—1	1.58	69.4	12.2	3.4	13.0	28.1	55.5	P	48.1
B	—	18½	—	—	26.4	—	—	—	—1	1.45	30.3	12.6	3.1	11.9	30.9	54.1	F	—
	—	—	—	—	—	—	—	—	—	1.45	30.3	11.1	3.1	19.6	25.3	52.0	P	42.9
A	379	—	—	—	19.0	—	—	—	—1	1.58	60.6*	11.9*	3.1*	15.8*	28.1*	53.0*	—	—
	—	36	—	—	—	—	—	—	—1	1.58	79.4	12.4	3.9	12.1	26.1	57.9	P	45.9

* Bereken / Calculated.

BOORGAT 113 : RINGBULT 711 : BOREHOLE 113

Kern 3½ dm.

Core 3½ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sand.....	24	0	24	0	Sand.
Duklip.....	12	6	36	6	Laterite.
Sand en moddersteen (geen kern-wins)	87	6	124	0	Sand and mudstone (no core recovery).
Skalie (stampboor).....	1	3	125	3	Shale (jump-drill).
Skalie, vaal en swart, met verspreide kwartskorrels na bo; koolstofhoudende sandsteen-bandjies (3 dm. en 4 dm.) 17 dm. en 24 dm. van bo af en twee steenkoollagies van 2 dm. naby onderent	4	8	129	11	Shale, grey and black, with scattered quartz grains towards top; 3-in. and 4-in. carbonaceous sandstone layers 17 in. and 24 in. from top and two 2-in. coal-bands near bottom.
Glanskool, gelaag; boonste helfte fyngelaag, onderste helfte erg sideriethoudend, met 2 dm. skalie 15 dm. van bo af en ½ dm. skalie 3 dm. van onder af	2	0	132	1	Coal, bright, banded; top half laminated, bottom half very sideritic, with 2 in. shale 15 in. from top and ½ in. shale 3 in. from bottom.
Skalie, swart, met enkele steenkoolaartjies	2	4	134	5	Shale, black, with a few coal-stringers.
Glanskool, fyngelaag.....	1	1	—	—	Coal, bright, laminated.
Skalie, swart, met agtien lagies (1 tot 4 dm.) steenkool en gemengde steenkool en skalie	54	3	—	—	Shale, black, with eighteen 1-in. to 4-in. bands of coal and mixed coal and shale.
Sandsteen, skalieagtig, met wryfvlakke	—	6	—	—	Sandstone, shaly, with slickensides.
Skalie en steenkool.....	—	7	—	—	Shale and coal.
Sandsteen, swart, fyngelaag, skalieagtig	2	10	—	—	Sandstone, black, laminated, shaly.
Skalie, swart.....	—	6	196	0	Shale, black.
Skalie, vaal, en swart met enkele dun steenkoollagies	4	1	—	—	Shale, grey, and black, shale with a few thin coal-bands.
Skalie, steenkoolagtig, en skalieagtige steenkool	2	6	202	7	Shale, coaly, and shaly coal.
Skalie, steenkoolagtig, en koolstofhoudende skalie met enkele steenkoollagies	11	8	—	—	Shale, coaly, and carbonaceous shale with a few coal-bands.
Skalie, vaalbruin, kleierig, sanderig na onder	1	0	—	—	Shale, greyish - brown, clayey, sandy towards bottom.
Sandsteen, effens skalieagtig, swart en vaalswart	3	2	—	—	Sandstone, slightly shaly, black and greyish-black.
Sandsteen, massief, wit, veldspaties, erg grintagtig, met 9 dm. fynkorrelrige, fyngelaagde sandsteen en steenkool in middel	12	3	231	1	Sandstone, massive, white, felspathic, very gritty, with 9 in. fine-grained, laminated sandstone and coal in middle.
Skalie, koolstofhoudend, steenkoolagtige skalie, en skalieagtige steenkool	4	5	—	—	Shale, carbonaceous, coaly shale and shaly coal.
Skalie, kleierig, swartbruin.....	1	4	—	—	Shale, clayey, blackish-brown.
Skalie, swart, met vier steenkoollagies van 1 dm.	5	2	—	—	Shale, black, with four 1-in. coal-bands.
Skalie, ligbruin.....	8	3	—	—	Shale, light brown.
Skalie, swartbruin, plek-plek swart	12	6	—	—	Shale, blackish-brown, black in parts.
Skalie, swartvaal tot swart, baie effens sanderig, sideriethoudend in onderste 2 vt., plek-plek met onduidelike fossiele	8	2	—	—	Shale, blackish-grey to black, very slightly sandy, sideritic in bottom 2 ft., with indistinct fossils in parts.
Sandsteen, swart, skalieagtig, fossilhoudend	1	7	—	—	Sandstone, black, shaly, fossiliferous.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sandsteen, vaalswart en swart-bruin, effens skalieagtig	3	2	—	—	Sandstone, greyish-black and blackish-brown, slightly shaly.
Skalie, steenkoolagtig.....		4	—	—	Shale, coaly.
Sandsteen, swart en vaalswart, baie fynkorrelrig, met steenkoolstrepies en -lensies; golwende lagies steenkool en skalie in onderste 12 dm.	3	8	—	—	Sandstone, black and greyish black, very fine-grained, with coal-streaks and lenses; wavy layers of coal and shale in bottom 12 in.
Sandsteen, skalieagtig, met baie pirietskool. (Kern voortaan 2½ dm. in diameter)	1	10	281	6	Sandstone, shaly, with many pyritic nodules. (Core from now on 2½ in. in diameter).
Sandsteen, massief, veldspaties, wit tot vaalwit, middel- tot grofkorrelrig; onderste 2 vt. swart	39	3	320	9	Sandstone, massive, feldspathic, white to greyish-white, medium to coarse-grained; bottom 2 ft. black.
Steenkool, breë lae swaar matkool en gemengde, piriethoudende steenkool om die beurt; sideriet-houdend in onderste 6 dm. met 'n skalieagtige lagie (2 dm.) 9 dm. van onder af, piriethoudend	5	7	326	4	Coal, alternating broad bands of heavy dull coal and mixed pyritic coal; sideritic in bottom 6 in. with a 2-in. shaly band 9 in. from bottom, pyritic.
Sandsteen; baie fynkorrelrige, effens mikahoudende, donker-vaal en vaalwit lagies om die beurt	9	5	—	—	Sandstone; alternating bands of dark grey and greyish-white, very fine-grained, slightly micaceous sandstone.
Sandsteen, vuilvaal, grofkorrelrig, effens veldspaties	2	6	338	3	Sandstone, dirty grey, coarse-grained, slightly feldspathic.
Matkool, swaar, en skalieagtige steenkool	1	0	—	—	Coal, dull, heavy, and shaly coal.
Sandsteen, fynkorrelrig, koolstofhoudend		3	—	—	Sandstone, fine-grained, carbonaceous.
Skalie, koolstofhoudend.....		4	—	—	Shale, carbonaceous.
Steenkool, gemeng; hoofsaaklik matkool; erg kalsiethoudend waar glanskool voorkom; 3½ dm. piriët 33 dm. van bo af	4	4	—	—	Coal, mixed; mainly dull coal, very calcitic where bright; 3½ in. pyrite 33 in. from top.
Skalie, steenkoolagtig.....		11	—	—	Shale, coaly.
Steenkool, gemeng, plek-plek skalieagtig, met 1 dm. skalie 30 dm. van bo af en 2 dm. skalie 43 dm. van bo af, sideriet- en piriethoudend	4	11	—	—	Coal, mixed, shaly in parts, with 1 in. shale 30 in. from top and 2 in. shale 43 in. from top, sideritic and pyritic.
Sideriet en glanskool.....		3	—	—	Siderite and bright coal.
Skalie, sanderig, met 1 dm. steenkool by onderent		6	—	—	Shale, sandy, with 1 in. coal at bottom.
Sandsteen; fynkorrelrige, vaal en donkervaal lagies om die beurt; effens mikahoudend	7	6	—	—	Sandstone; alternating bands of grey and dark grey, fine-grained sandstone; slightly micaceous.
Skalie, swart, effens sanderig, met verspreide kwartskorrels en baie swart sandsteenstrepies en -lagies	11	2	—	—	Shale, black, slightly sandy, with scattered quartz grains and many black sandstone streaks and layers.
Sandsteen, swart en vaal, met golwende lagies swart, sanderige skalie	4	0	374	0	Sandstone, black and grey, with wavy layers of black, sandy shale.
Matkool.....		9	—	—	Coal, dull.
Sandsteen, piriët- en koolstofhoudend		7	—	—	Sandstone, pyritic and carbonaceous.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Steenkool, gemeng, met 1 dm. koolstofhoudend sandsteen		8	377	2	Coal, mixed, with 1 in. carbonaceous sandstone.
Sandsteen, vaal, vaalswart, en vuilvaal, fyngelaag, skalieagtig na bo	9	10	387	0	Sandstone, grey, greyish-black, and dirty grey, laminated, shaly towards top.

BOORGAT 113: RINGBULT 711 : BOREHOLE 113

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
		Dm. In.	Vt. Ft.	Dm. In.		
S 70	N.G.....	56	129	11	N.S.	
C	Glanskool, gelaag; boonste helfte fyngelaag, onderste helfte erg sideriethoudend, met 2 dm. skalie 15 dm. van bo af en $\frac{1}{2}$ dm. skalie 3 dm. van onder af ($2\frac{1}{2}$ dm. kern verloor)	24	132	1		Coal, bright, banded; top half laminated, bottom half very sideritic, with 2 in. shale 15 in. from top and $\frac{1}{2}$ in. shale 3 in. from bottom (2 in. core lost).
B	N.G.....	28	134	5	N.S.	
	Glanskool, fyngelaag. N.G. tot by 320 vt. 9 dm. (kern daarna $2\frac{1}{2}$ dm. in diameter)	13	—	—		Coal, bright, laminated. N.S. down to 320 ft. 9 in. (core now $2\frac{1}{2}$ in. in diameter).
A	Steenkool, breë lae swaar matkool en gemengde, piriethoudende steenkool om die beurt; sideriethoudend in onderste 6 dm., met skalieagtige lagie (2 dm.) 9. dm. van onder af, piriethoudend	67	326	4		Coal, broad bands of heavy dull coal and mixed, pyritic coal, sideritic in bottom 6 in. with a 2-in. shaly band 9 in. from bottom, pyritic.
S 71	N.G.....	30	338	3	N.S.	
	N.G.....	19	—	—	N.S.	
B	Steenkool, gemeng; hoofsaaklik matkool; erg kalsiethoudend waar glanskool voorkom; $3\frac{1}{2}$ dm. piriët 33 dm. van bo af uitgesluit	52	—	—		Coal, mixed; mainly dull coal; very calcitic where bright; $3\frac{1}{2}$ in. pyrite 33 in. from top excluded.
A	N.G.....	11	—	—	N.S.	
	Steenkool, gemeng, plek-plek skalieagtig, met 1 dm. skalie 30 dm. van bo af en 2 dm. skalie 43 dm. van bo af, sideriet- en piriethoudend	—	—	—		Coal, mixed, shaly in parts, with 1 in. shale 30 in. from top and 2 in. shale 43 in. from top, sideritic and pyritic.
	N.G.....	9	351	4	N.S.	
	(7 dm. kern verloor)					(7 in. core lost).

BOORGAT 113 : RINGBULT 711 : BOREHOLE 113

ANALYSIS OF AIR-DRIED COAL

ANALISE VAN LUGGEDROOGDE STEENKOOI

No. van B.N.I.-monster F.R.I. sample no.	DIKTE (DM.) THICKNESS (IN.)			RU-STEENKOOI RAW COAL						WASTOETS WASHING TEST		DRYESTOF FLOAT						SINK- STOF SINK	
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled		V.W. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	Groot- te (Dm.) Size (In.)	S.G.	Op- brengs Yield %	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	As Ash %
S 70 C	—	28	24	—	—	26·3	—	—	—	— ^{3/16}	1·40	33·7	—	3·7	6·3	34·7	55·3	3	36·4
	—	—	13	—	3·6	18·4	32·0	46·0	14g	—	—	—	—	—	—	—	—	—	—
	2,223	—	67	—	—	27·2	—	—	—	—	—	—	—	—	—	—	—	—	—
S 71 B	163	48½	48½	10·1	2·8	25·5	23·5	48·2	P	—	—	—	—	—	—	—	—	—	—
	11	3½	59	10·7	3·6	23·2	25·0	48·2	P	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

BOORGAT 114 : ELANDSBOSCH 714 : BOREHOLE 114
Kern 3½ dm.

Core 3½ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sand.....	5	0	5	0	Sand.
Oppervlakkalksteen; slegs onge- veer 27 vt. kernwins; die kalk- steen bevat talryke bruin sand- steeninsluitels van wisselende grootte; die geheel het 'n gevle- te voorkoms	112	0	117	0	Surface-limestone; only about 27 ft. core recovery; the limestone contains numerous brown sand- stone inclusions of variable size; the whole has a mottled appearance.
Moddersteen, vaalblou, plek-plek sjokoladebruin en ligpers in boonste derde; onderste 21 dm. vaalswart en skalieagtig	228	9	345	9	Mudstone, greyish - blue, with patches of chocolate-brown and light purple in top third; bottom 21 in. greyish-black and shaly.
Glanskool, gelaag, met enkele skalielagies by bo- en onderent, kalsiet- en piriethoudend	1	4	—	—	Coal, bright, banded, with a few shale bands at top and bottom, calcitic and pyritic.
Skalie, kleierig, donkervaal en swartvaal, met wryfvlakke by onderent	5	9	—	—	Shale, clayey, dark grey, and blackish-grey, with slickensides at bottom.
Glanskool, gelaag, kalsiet- en piriethoudend	1	6	—	—	Coal, bright, banded, calcitic and pyritic.
Skalie, vaal, swart na onder, met 10 dm. gemengde steenkool en skalie naby bo-ent	4	4	—	—	Shale, grey, black towards bottom, with 10 in. mixed coal and shale near top.
Glanskool, gelaag, effens piriethoudend, kalsiethoudend na bo, met 'n skalieagtige lagie van 'n duim, 3 dm. van onder af	1	4	—	—	Coal, bright, banded, slightly pyritic, calcitic towards top, with a 1-in. shaly band 3 in. from bottom.
Skalie, swart, met twee lagies (5 dm.) gemengde steenkool en skalie	4	0	364	0	Shale, black, with two 5-in. bands of mixed coal and shale.
Steenkool, kalsiethoudend.....	—	1	—	—	Coal, calcitic.
Glanskool, gelaag, met 3 dm. skalie 25 dm. van bo af en 3½ dm. skalie 35 dm. van bo af, effens piriethoudend (4 dm. kern ver- loor)	5	9	370	2	Coal, bright, banded, with 3 in. shale 25 in. from top and 3½ in. shale 35 in. from top, slightly pyritic (4 in. core lost).
Skalie, swart, met 15 dm. gemeng- de steenkool en skalie by onder- ent	5	9	—	—	Shale, black, with 15 in. mixed coal and shale at bottom.
Skalie, koolstofhoudend; steen- kool en skalie tussengelaag met glanskool	10	10	386	9	Shale, carbonaceous; coal and shale interbedded with bright coal.
Glanskool, gelaag, effens piriethoudend	—	11	—	—	Coal, bright, banded, slightly pyritic.
Skalie tussengelaag met steenkool	1	1	388	9	Shale interbedded with coal.
Glanskool, gelaag, piriethoudend in middel, skalieagtig in onder- ste 2 dm., met 1½ dm. skalie- agtige, korrelrige steenkool 14 dm. van onder af	3	5	—	—	Coal, bright, banded, pyritic in middle, shaly in bottom 2 in., with 1½ in. shaly, granular coal 14 in. from bottom.
Skalie tussengelaag met steenkool	6	4	—	—	Shale interbedded with coal.
Glanskool, gelaag, effens piriethoudend	2	1½	—	—	Coal, bright, banded, slightly pyritic.
Skalie.....	—	1½	—	—	Shale.
Steenkool tussengelaag met skalie	1	7	—	—	Coal interbedded with shale.
Glanskool, gelaag, met 2 dm. skalie 13 dm. van bo af	3	10	—	—	Coal, bright, banded with 2 in. shale 13 in. from top.
Skalie.....	—	2	—	—	Shale.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Glanskool, gelaag, met 2 dm. skalie 23 dm. van bo af, piriethoudend na bo	4	5	410	10	Coal, bright, banded with 2 in. shale 23 in. from top, pyritic towards top.
Skalie, swart, met twee steenkool- lagies van 2 dm.	6	11	—	—	Shale, black, with two 2-in. coal- bands.
Glanskool, gelaag; onderste 4 dm. skaliegagtig	1	3	419	0	Coal, bright, banded; bottom 4 in. shaly.
Skalie, swart, met 10 dm. vaal skalie naby bo-ent; steenkool- lagies (2 dm. en 6 dm.) in middel	11	3	430	3	Shale, black, with 10 in. grey shale near top; 2-in. and 6-in. coal-layers in middle.
Glanskool, gelaag, plek-plek skalie- agtig	4	7	—	—	Coal, bright, banded, shaly in parts.
Glanskool, gelaag, piriethoudend, erg sideriethoudend	1	0	—	—	Coal, bright, banded, pyritic, very sideritic.
Skalie, swart, met talryke dun steenkoollagies	7	0	—	—	Shale, black, with numerous thin coal-bands.
Glanskool, gelaag, plek-plek skalie- agtig, met 2 dm. skaliegagtige steenkool 10 dm. van bo af, sideriethoudend	2	8	445	6	Coal, bright, banded, shaly in parts, with 2 in. shaly coal 10 in. from top, sideritic.
Skalie, swart, met steenkoollae...	11	9	—	—	Shale, black, with coal-bands.
Skalie tussengelaag met steenkool; 'n bietjie glanskool ook aanwesig	2	10	—	—	Shale interbedded with coal; some bright coal also present.
Skalielae, breed, breë glanskoollae, en breë lae tussengelaagde skalie en steenkool om die beurt	15	11	—	—	Shale, broad bands, broad bands of bright coal, and broad bands of interbedded shale and coal alternating.
Skalie met vier steenkoolbandjies (1 tot 4 dm.)	3	11	479	11	Shale with four 1-in. to 4-in. coal- bands.
Skalielae, breed, breë glanskoollae, en breë lae tussengelaagde skalie en steenkool om die beurt	9	1	—	—	Shale bands, broad, alternating with broad bands of bright coal and broad bands of interbedded shale and coal.
Glanskool, gelaag, effens sideriet- houdend in onderste derde	3	9	—	—	Coal, bright, banded, slightly sideritic in bottom third.
Steenkool, sideriethoudend.....		4	494	6	Coal, sideritic.
Skalie, swartbruin, met enkele wryfvlakke	1	6	—	—	Shale, blackish-brown with a few slickensides.
Steenkool, erg sideriethoudend...		9	—	—	Coal, very sideritic.
Skalie, swart, met bruinswart skalie in onderste helfte	4	0	—	—	Shale, black, with brownish-black shale in bottom half.
Skalie, swart, en koolstofhoudende skalie met twintig steenkool- lagies (1 tot 6 dm.), sommige sideriethoudend; verspreide kwartskorrels in onderste 8 vt.	35	3	536	0	Shale, black, and carbonaceous shale with twenty 1-in. to 6-in. coal-bands, some sideritic; scat- tered quartz grains in bottom 8 ft.
Sandsteen, swart tot vuilvaal, skaliegagtig tot middelkorrelrig		8	—	—	Sandstone, black to dirty grey, shaly to medium-grained.
Skalie, swart, met vier sideriet- houdende steenkoollae (1 tot 3 dm.) en 'n erg sideriet- en piri- ethoudende steenkoollaag (12 dm.) by onderent	6	6	—	—	Shale, black, with four 1-in. to 3-in. sideritic coal-bands and a 12-in. very sideritic and pyritic coal-band at bottom.
Sandsteen, koolstofhoudend, grin- terig		7	—	—	Sandstone, carbonaceous, gritty.
Skalie, koolstofhoudend, met enkele steenkoollagies	2	6	—	—	Shale, carbonaceous, with a few coal-layers.
Skalie, swart, met verspreide kwartskorrels	1	9	—	—	Shale, black, with scattered quartz grains.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
andsteen, swart, baie fynkorrelrig		3	—		Sandstone, black, very fine-grained.
kalie, swart, en koolstofhoudende skalie met agt steenkoolagies (1 tot 4 dm.), sommige sideriet-houdend	9	4	—		Shale, black, and carbonaceous shale with eight 1-in. to 4-in. coal-bands, some sideritic.
andsteen, swart, koolstofhoudend		6	—		Sandstone, black, carbonaceous.
kalie, swart, met enkele dun steenkoolagies, bruinerig naby bo-ent	18	4	576	5	Shale, black, with a few thin coal-layers, brownish near top
kalie, steenkoolagtig, koolstofhoudende skalie, en skalieagtige steenkool	15	4	—		Shale, coaly, carbonaceous shale and shaly coal.
andsteen, swart, fynkorrelrig....		9	—		Sandstone, black, fine-grained.
skalie, swartbruin.....	3	7	—		Shale, blackish-brown.
andsteen, swart.....	4	0	—		Sandstone, black, shaly.
skalie, swart, en dun sandsteen-lagies	2	0	—		Shale, black, and thin sandstone bands.
andsteen, swart; onderste helfte skalieagtig	2	8	—		Sandstone, black; bottom half shaly.
skalie en erg sideriethoudende steenkool	2	11	—		Shale and very sideritic coal.
andsteen, swart, skalieagtig.....		6	—		Sandstone, black, shaly.
skalie, swart, koolstofhoudende skalie, en steenkoolagtige skalie met wryfvlakke in boonste 12 dm.	11	11	616	11	Shale, black, carbonaceous shale, and coaly shale with slickensides in top 12 in.
skalie, swart, koolstofhoudende skalie, skalieagtige steenkool, en 'n bietjie swaar matkool	33	11	—		Shale, black, carbonaceous shale, shaly coal, and a little heavy dull coal.
skalie, swartbruin by bo-ent, ligbruin en effens sanderig by onderent	2	0	653	4	Shale, blackish-brown at top, light-brown, slightly sandy at bottom.
Sandsteen, swart, erg fynkorrelrig	1	6	—		Sandstone, black, very fine-grained.
Skalie, kleierig, bruinswart.....	2	1	—		Shale, clayey, brownish-black.
Sandsteen, erg fynkorrelrig, vaal-swart, effens mikahoudend, fyn-gelaag na onder	9	0	—		Sandstone, very fine-grained greyish-black, slightly micaceous, laminated towards bottom.
Sandsteen, wit, massief, veldspaties, fyn- tot grofkorrelrig; onderste 12 dm. vaalswart tot donkervaal	25	4	691	9	Sandstone, white, massive, feldspathic; fine- to coarse-grained; bottom 12 in. greyish-black to dark grey.
Matkool, homogeen, plek-plek effens piriethoudend, met 'n middelmatige glans	3	9	—		Coal, dull, homogeneous, slightly pyritic in parts, with a moderate lustre.
Matkool, homogeen, plek-plek skalieagtig, tussengelaag met glanskool by onder- en bo-ent; 'n pirietaag van 'n halfduim 22 dm. van bo af	3	4	—		Coal, dull, homogeneous, shaly in parts, interbedded with bright coal at top and bottom; $\frac{1}{2}$ -in. pyrite band 22 in. from top.
Steenkool, gemeng; hoofsaaklik matkool; boonste 10 dm. erg sideriethoudend; 3 dm. sideriethoudende steenkool 8 dm. van onder af; plek-plek piriethoudend	2	0	700	10	Coal, mixed; mainly dull coal; top 10 in. very sideritic; 3 in. sideritic coal 8 in. from bottom; pyritic and calcitic in parts.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sandsteen, fynkorrelrig, plek-plek fyngelaag, witterig, vaalwit, met swarterige en vaalswart, golwendelagies	22	0	—	—	Sandstone, fine-grained, laminated in places, micaceous, whitish, greyish-white, with blackish and greyish-black, wavy layers.
Sandsteen, grofkorrelrig, wit, massief, veldspaties; onderste 9 dm. swart en koolstofhoudend	8	11	—	—	Sandstone, coarse-grained, white, massive, felspathic; bottom 9 in. black and carbonaceous.
Skalie, kleierig, bruin.....		2	—	—	Shale, clayey, brown.
Glanskool.....		5	—	—	Coal, bright.
Sandsteen, koolstofhoudend.....		3	732	7	Sandstone, carbonaceous.
Matkool, skalieagtig, piriethoudend by bo-ent, met enkele wryfvlakke	2	3	—	—	Coal, dull, shaly, pyritic at top, with occasional slickensides.
Steenkool, gemeng; hoofsaaklik glansende matkool; effens piriethoudend	4	7	—	—	Coal, mixed; mainly lustrous dull coal; slightly pyritic.
Skalie, koolstofhoudend, en skalieagtige steenkool	1	3	—	—	Shale, carbonaceous, and shaly coal.
Glanskool, gelaag, minderwaardig en piriethoudend in onderste helfte	1	1	—	—	Coal, bright, banded, inferior and pyritic in bottom half.
Steenkool, gemeng; hoofsaaklik matkool in boonste helfte en hoofsaaklik glanskool in onderste helfte; effens piriethoudend	1	8	—	—	Coal, mixed; mainly dull coal in top half and mainly bright coal in bottom half; slightly pyritic.
Skalie, steenkoolagtig, en matkool	1	2	—	—	Shale, coaly, and dull coal.
Steenkool; glanskool en skalieagtige matkool gemeng met $\frac{1}{2}$ dm. piriet 13 dm. van onder af en 'n groot pirietknol in onderste 10 dm. (12 dm. kern verloor)	3	8	749	3	Coal; bright coal and shaly dull coal mixed, with $\frac{1}{2}$ in. pyrite 13 in. from bottom and a large pyrite nodule in bottom 10 in. (12 in. core lost).
Skalie, steenkoolagtig, en koolstofhoudende skalie	1	11	—	—	Shale, coaly, and carbonaceous shale.
Skalie, swart, sanderig, met talryke dun, swart sandsteenlagies	5	3	—	—	Shale, black, sandy, with many thin black sandstone bands.
Sandsteen, fyn- tot middelkorrelrig, wit, veldspaties, massief, koolstofhoudend in onderste 4 dm.	3	7	760	0	Sandstone, fine- to medium-grained, white felspathic, massive, carbonaceous in bottom 4 in.
Matkool met $\frac{3}{4}$ dm. piriet in middel en piriethoudend in onderste helfte	3	6	763	6	Coal, dull, with $\frac{3}{4}$ in. pyrite in middle and pyritic in bottom half.
Sandsteen, koolstofhoudend, grofkorrelrig	4		763	10	Sandstone, carbonaceous, coarse-grained.

BOORGAT 114 : ELANDBOSCH 714 : BOREHOLE 114

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
			Dm. In.	Vt. Ft.	
67	N.G.....	16	345	9	N.S.
D	Glanskool, gelaag, met enkele skalielagies by bo-en onder- ent, kalsiet- en piriethou- dend	16	—	—	Coal, bright, banded, with a few shale bands at top and bottom, calcitic and pyritic.
C	N.G.....	69	—	—	N.S.
	Glanskool, gelaag, kalsiet- en piriethoudend	18	—	—	Coal, bright, banded, calcitic and pyritic.
B	N.G.....	52	—	—	N.S.
	Glanskool, gelaag, effens piriethoudend, kalsiethou- dend na bo, met 'n skali- agtige lagie van 'n duim 3 dm. van onder af	16	—	—	Coal, bright, banded, slightly pyritic, calcitic towards top, with a 1-in. shaly band 3 in. from bottom.
A	N.G.....	49	—	—	N.S.
	Glanskool, gelaag, met 3 dm. skalie 25 dm. van bo af en 3 dm. skalie 35 dm. van bo af, effens piriethoudend (4 dm. kern verloor)	69	370	2	Coal, bright, banded, with 3 in. shale 25 in. from top and 3½ in. shale 35 in. from top, slightly pyritic (4 in. core lost).
68	N.G.....	13	388	9	N.S.
F	Glanskool, gelaag, piriethou- dend in middel, skaliagtig in onderste 2 dm., met 1½ dm. skaliagtige, korrelrige steenkool 14 dm. van onder af	41	—	—	Coal, bright, banded, pyritic in middle, shaly in bottom 2 in., with 1½ in. shaly, granular coal 14 in. from bottom.
E	N.G.....	76	—	—	N.S.
	Glanskool, gelaag, effens piriethoudend	25½	—	—	Coal, bright, banded, slightly pyritic.
D	N.G.....	1½	—	—	N.S.
	Steenkool tussengelaag met skalie	19	—	—	Coal, interbedded with shale
C	Glanskool, gelaag, met 2 dm. skalie 13 dm. van bo af	46	—	—	Coal, bright, banded, with 2 in. shale 13 in. from top.
B	N.G.....	2	—	—	N.S.
	Glanskool, gelaag, met 2 dm. skalie 23 dm. van bo af, piriethoudend na bo	53	—	—	Coal, bright, banded, with 2 in. shale 23 in. from top, pyritic towards top.
A	N.G.....	83	—	—	N.S.
	Glanskool, gelaag; onderste 4 dm. skaliagtig	15	419	0	Coal, bright, banded; bottom 4 in. shaly.
69	N.G.....	135	430	3	N.S.
C	Glanskool, gelaag, plek-plek skaliagtig	55	—	—	Coal, bright, banded, shaly in parts.
B	N.G.....	96	—	—	N.S.
	Glanskool, gelaag, plek-plek skaliagtig met 2 dm. skali- agtige steenkool 10 dm. van bo af, sideriethoudend	32	445	6	Coal, bright, banded, shaly in parts, with 2 in. shaly coal 10 in. from top, sideritic.
	N.G.....	413	479	11	N.S.
	N.G.....	109	—	—	N.S.

Bg. 114 (verv.)

B.H. 114 (contd.)

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
A	Glanskool, gelaag, effens sideriethoudend in onderste derde N.G..... (17 dm. kern verloor tussen 479 vt. 11 dm. en 494 vt. 6 dm.)	Dm. In. 45 4	Vt. Ft. — 494	Dm. In. 6	Coal, bright, banded, slightly sideritic in bottom third. N.S. (17 in. core lost between 479 ft. 11 in. and 494 ft. 6 in.).
S 193 C	N.G..... Matkool, homogeen, plek-plek effens piriethoudend, met 'n middelmatige glans	304 45	691 —	9	N.S. Coal, dull, homogeneous, slightly pyritic in parts, with a moderate lustre.
B	Matkool, homogeen, plek-plek skaliegagtig, tussengelaag met glanskool by onder- en bo-ent; 'n pirietaag van 'n halfduim 22 dm. van bo af	40	—		Coal, dull, homogeneous, shaly in parts, interbedded with bright coal at top and bot- tom; a $\frac{1}{2}$ -in. pyrite band 22 in. from top.
A	Steenkool, gemeng; hoofsaak- lik matkool; boonste 10 dm. erg sideriethoudend; 3 dm. sideriethoudende steenkool 8 dm. van onder af; plek- plek piriët- en kalsiethou- dend	24	700	10	Coal, mixed; mainly dull coal; top 10 in. very sideritic; 3 in. sideritic coal 8 in. from bottom; pyritic and calcitic in parts.
S 194	N.G..... N.G.....	3 27	732 —	7	N.S. N.S.
D	Steenkool, gemeng; hoofsaak- lik glansende matkool; ef- fens piriethoudend N.G.....	55 28	— —		Coal, mixed; mainly lustrous dull coal; slightly pyritic. N.S.
C	Steenkool, gemeng; hoofsaak- lik matkool in boonste helfte en hoofsaaklik glans- kool in onderste helfte; effens piriethoudend N.G.....	20 14	— —		Coal, mixed; mainly dull coal in top half and mainly bright coal in bottom half; slightly pyritic. N.S.
B	Steenkool; glanskool, skalie- agtige matkool en gemengde kool, met $\frac{1}{2}$ dm. piriët 13 dm. van onder af en 'n groot piriëtknol in onderste 10 dm. (12 dm. kern verloor tussen 732 vt. 7 dm. en 749 vt. 3 dm.) N.G.....	44 129	749 760	3 0	Coal; bright coal, shaly dull coal and mixed coal with $\frac{1}{2}$ in. pyrite 13 in. from bot- tom and a pyrite nodule in bottom 10 in. (12 in. core lost between 732 ft. 7 in. and 749 ft. 3 in.). N.S.
A	Matkool met $\frac{3}{4}$ dm. piriët in middel en piriethoudend in onderste helfte	42	763	6	Coal, dull, with $\frac{3}{4}$ in. pyrite in middle and pyritic in bottom half.

B.H. 114 (contd.)

Bg. 114 (verv.)

No. van B.N.I.-monster F.R.I. sample no.	Dikte (Dm.) Thickness (in.)		Ru-steenKool Raw Coal						Wastoets Washing Test		Drystof Float						Sink- stop Sink	
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W.	H ₂ O	As	V.B.	V.K.	Swel- syfer Swel- ling number	Groot- te (Dm.) Size (in.)	S.G.	V.W.	H ₂ O	As	V.B.	V.K.	Swel- syfer Swel- ling number	As	Ash
			C.V.	%	%	V.M.	F.C.	%			lb./lb.	%	%	%	%	%		
S 193	—	45	—	—	22.3	—	—	—	—1	1.58	11.4	3.0	18.5	20.0	58.5	F	34.0	
B	—	40	—	—	28.8	—	—	—	—1	1.58	11.1	3.0	19.4	23.5	54.1	P	38.8	
A	—	24	—	—	23.2	—	—	—	—1	1.58	11.5	3.4	16.3	26.8	53.5	P	35.3	
D	408	55	—	—	21.3	—	—	—	—1	1.58	12.0	3.1	14.9	26.1	55.9	1Ag	37.4	
C	28	20	—	—	19.1	—	—	—	—1	1.58	12.0	4.1	15.5	27.1	53.3	F	36.4	
B	14	44	10.6	2.5	24.3	27.1	46.1	F	—1	1.58	—	—	—	—	—	—	—	
A	129	42	—	—	21.4	—	—	—	—1	1.58	11.8	3.1	15.3	21.1	60.5	F	47.7	

BOORGAT 115 : GOEDEHOOP 1372 : BOREHOLE 115

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
ind.....	15	0	15	0	Sand.
awa, verweer.....	12	0	73	0	Lava, weathered.
awa.....	70	0	143	3	Lava.
awa met talryke insluitsels van fynkorrelrige, dieprooi sand- steen	3	11	—	—	Lava with numerous inclusions of fine-grained, deep red sand- stone.
awa met baie amandels.....	7	1	—	—	Lava, with many amygdals.
awa sonder amandels.....	4	7	—	—	Lava without amygdals.
awa met baie amandels; laasge- noemde verminder na onder	15	2	174	0	Lava with many amygdals; the latter decrease towards bottom.
awa betreklik vry van amandels	22	0	196	0	Lava relatively free from amy- gdals.
awa met baie amandels.....	108	3	304	3	Lava with many amygdals.
awa met baie min amandels...	28	6	—	—	Lava with very few amygdals.
awa; kilrand met enkele kalsiet- bande (Drakensbergawa)	2	6	335	5	Lava; chilled phase with a few calcite bands (Drakensberg Lava).
ndsteen, verhard.....	—	7	—	—	Sandstone, indurated.
ndsteen, fynkorrelrig, met 'n groenerige skynsel	31	0	—	—	Sandstone, fine-grained, with a greenish tint.
ndsteen, vaal en vuilvaal, met tekens van fyngelaagheid en kleierige dele in onderste helfte; onderste 4 dm. donker gekleur deur koolstofhoudende mate- riaal	12	0	—	—	Sandstone, grey and dirty grey, with signs of lamination and clayey portions in bottom half; bottom 4 in. coloured dark with carbonaceous material.
ndsteen met baie vertikale wortelafdrukke	—	10	379	10	Sandstone with many vertical root-impressions.
ndsteen, wit, plek-plek effens fyngelaag en groenkleurig; lig- groen skynsel in onderste 25 vt.	361	9	741	7	Sandstone, white, slightly lami- nated and greenish in parts; light green tint in bottom 25 ft.
ndsteen, liggroen, met enkele kalkhoudende knolle (Holkrans- sandsteen)	17	8	759	3	Sandstone, light green, with occa- sional calcareous nodules (Cave Sandstone).
ndsteen, baie fynkorrelrig, lig- en sjokoladebruin, plek-plek perserig, met talryke kalkhou- dende knolle, plek-plek kleierig	264	5	1,023	8	Sandstone, very fine-grained, light brown and chocolate-brown, purplish in parts, with numerous calcareous nodules; clayey in parts.
ndsteen, ligrooi; boonste 12 dm. kwartsietagtig en middelkorrel- rig, res grofkorrelrig en plek- plek grinterig; groterige kwarts- spoelklippies en kleierige dele om voor; matriks kleierig	3	6	—	—	Sandstone, light red; top 12 in. quartzitic and medium-grained, remainder coarse-grained and gritty in parts; quartz pebbles and clayey portions are present; matrix clayey.
ndsteen, plek-plek kleierig, lig- rooi en sjokoladebruin	7	4	—	—	Sandstone, clayey in parts, light red and chocolate-brown.
ndsteen, baie fynkorrelrig, plek- plek kleierig, met 'n gevlekte voorkoms; boonste 2 vt. kalsiet- houdend	6	3	—	—	Sandstone, very fine-grained, clayey in parts, with a mottled appearance; top 2 ft. calcitic.
ndsteen, fynkorrelrig, ligrooi in boonste helfte, donkerbruin tot rooibruin in onderste helfte waar lit middelkorrelrig is, met enkele kleinknolle	9	4	—	—	Sandstone, fine-grained, light red in top half, dark brown to pinkish-brown in bottom half where it is medium-grained, with occasional clay-pellets.
ndsteen, kleierig, sjokoladebruin	4	6	—	—	Sandstone, clayey, chocolate - brown.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sandsteen, baie fynkorrelrig, geel en ligbruin (Rooilae)	1	9	—	—	Sandstone, very fine-grained, yellow and light brown (Red Beds).
Sandsteen, baie fynkorrelrig, wit; onderste 9 dm. grinterig en bruinerig	3	7	—	—	Sandstone, very fine-grained, white; bottom 9 in. gritty and brownish.
Sandsteen, fynkorrelrig, vaalbruin, met dun middel- tot grofkorrelrige dele	22	10	—	—	Sandstone, fine-grained, greyish-brown, with thin medium- to coarse-grained parts.
Sandsteen, fynkorrelrig tot grinterig; boonste en onderste 15 dm. grofkorrelrig tot grinterig, onderste 17 dm. groenkleurig; res vaalwit	7	3	—	—	Sandstone, fine-grained to gritty; top and bottom 15 in. coarse-grained to gritty, bottom 17 in. greenish; rest greyish-white.
Sandsteenlae, middelkorrelrig, vaalgeel en bruin, sanderig, kleierig	2	0	—	—	Sandstone bands, medium-grained, greyish-yellow and brown, sandy, clayey.
Sandsteen, fyn- tot grofkorrelrig, plek-plek grinterig, vaalwit, plek-plek liggroen, met enkele sjokoladebruin, sanderige, kleierige lae 12 vt. van onder af	54	0	—	—	Sandstone, fine- to coarse-grained, gritty in places, greyish-white, light green in parts, with occasional chocolate-brown, sandy, clayey bands 12 ft. from bottom.
Moddersteen, ligpers, vaal na onder, sanderig veral in onderste helfte, waar dit groenkleurig is	12	9	—	—	Mudstone, light purple, grey towards bottom, sandy especially in bottom half, where it is tinged green.
Sandsteen, fyn- tot grofkorrelrig, vaalgroen, plek-plek groen getint, fyngelaag en kleierig, met groterige liggroen kleiknolle hier en daar (Moltenolae)	7	5	1,197	6	Sandstone, fine- to coarse-grained, greyish-green, tinged green in parts, laminated and clayey, with biggish light green clay nodules in parts (Molteno Beds).
Moddersteen, sjokoladebruin, vaalgroen na onder	32	9	—	—	Mudstone, chocolate-brown, greyish-green towards bottom.
Moddersteen, sjokoladebruin en vaal bande om die beurt	14	4	—	—	Mudstone, with alternating chocolate-brown and grey bands.
Moddersteen, vaal; onderste 18 dm. swart en skalieagtig	233	2	1,518	10	Mudstone, grey, bottom 18 in. black and shaly.
Glanskool, gelaag, erg piriethoudend in boonste 6 dm. en erg skalieagtig en piriethoudend in onderste 4 dm., kalsiethoudend	2	7	—	—	Coal, bright, banded, very pyritic in top 6 in. and very shaly and pyritic in bottom 4 in., calcitic.
Skalie, swart en vaal met 'n wryfvlak by onderent	5	4	—	—	Shale, black, and bands of grey shale, with a slickenside at bottom.
Glanskool, gelaag, skalieagtig veral in boonste en onderste gedeeltes van band, priet- en kalsiethoudend	11	—	—	—	Coal, bright, banded, shaly especially at top and at bottom of band pyritic and calcitic.
Skalie, swart.....	—	5½	—	—	Shale, black.
Glanskool, gelaag, skalieagtig in boonste 1 dm., piriethoudend	1	5½	—	—	Coal, bright, banded, shaly in top 1 in., pyritic.
Skalie, swart, en bandjies vaal skalie, wryfvlak by onderent	2	9	—	—	Shale, black, and bands of grey shale; slickenside at bottom.
Glanskool, gelaag, skalieagtig....	1	2	1,523	6	Coal, bright, banded; shaly.
Skalie, swart.....	1	7	—	—	Shale, black.
Skalielae en glanskoollae om die beurt	3	7	—	—	Shale bands alternating with bright coal-bands.
Glanskool, gelaag, plek-plek skalieagtig en piriethoudend, veral in onderste 4 dm.	1	8	—	—	Coal, bright, banded, shaly and pyritic in parts, especially in bottom 4 in.

Bg. 115 (verv.)

B.H. 115 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
skalie en glanskool.....	1	4	—	—	Shale and bright coal.
glanskool, gelaag, piriethoudend en skalieagtig in onderste 3 dm.	1	0	—	—	Coal, bright, banded, pyritic and shaly in bottom 3 in.
skalie, swart.....	—	3	—	—	Shale, black.
glanskool, gelaag.....	1	2	—	—	Coal, bright, banded.
steenkool en sideriet.....	—	7	1,544	8	Coal and siderite.
skalie, swart.....	4	1	—	—	Shale, black.
skalie en steenkool, fyngelaag....	1	11	—	—	Shale and coal, laminated.
glanskool, gelaag, skalieagtig in boonste 5 dm.	1	1	—	—	Coal, bright, banded, shaly in top 5 in.
skalielae en glanskoollae om die beurt, plek-plek piriethoudend en fyngelaag by bo-ent	4	5	—	—	Shale bands alternating with bright coal bands; pyritic in parts and laminated at top.
glanskool, gelaag, piriethoudend, skalieagtig in onderste 2 dm.	1	5	—	—	Coal, bright, banded, pyritic, shaly in bottom 2 in.
skalie, swart.....	2	2	1,559	9	Shale, black.
glanskoollae en kalielae om die beurt	—	10	—	—	Coal bands, bright, alternating with shale bands.
glanskool, gelaag, skalieagtig en piriethoudend	1	1	—	—	Coal, bright, banded, shaly and pyritic.
glanskool, gelaag, piriethoudend en effens sideriethoudend in onderste 15 dm.	2	9	—	—	Coal, bright, banded, pyritic and slightly sideritic in bottom 15 in.
skalie, swart, met 'n wryfvlak in boonste helfte	2	7	1,567	0	Shale, black, with a slickenside in top half.
skalie en steenkool, gemeng.....	1	9	—	—	Shale and coal, mixed.
glanskool, gelaag.....	1	3	—	—	Coal, bright, banded.
glanskool, gelaag, gemeng met skalie	—	4	—	—	Coal, bright, banded, mixed with shale.
glanskool, gelaag, piriethoudend, skalieagtig in onderste 4 dm., met 'n wryfvlak in middel	2	4	—	—	Coal, bright, banded, pyritic; shaly in lower 4 in., with a slickenside in middle.
skalie en skalieagtige, gelaagde glanskool om die beurt	1	7	—	—	Shale bands alternating with shaly, banded bright coal.
glanskool, gelaag.....	1	1	—	—	Coal, bright, banded.
glanskool, gelaag, en skalie.....	—	7	—	—	Coal, bright, banded, and shale.
glanskool, gelaag.....	1	11	—	—	Coal, bright, banded.
skalie.....	—	1½	—	—	Shale.
glanskool, gelaag, vitrietagtig....	—	10	—	—	Coal, bright, banded, vitrainous.
glanskool, gelaag, skalieagtig en erg kalsiethoudend	—	10	—	—	Coal, bright, banded, shaly, and very calcitic.
glanskool, gelaag, erg piriethou- dend (19 dm. kern verloor, ver- moedelik naby 1,567 vt.)	1	0½	1,582	3	Coal, bright, banded, very pyritic (19 in. core lost presumably near 1,567 ft.).
skalie, swart, met wryfvlakke in onderste 12 dm.	5	4	—	—	Shale, black, slickenside in bottom 12 in.
glanskool, gelaag.....	—	11	—	—	Coal, bright, banded.
skalie, swart.....	—	10	—	—	Shale, black.
glanskool, gelaag, erg piriethou- dend; sideriethoudend by onder- ent	1	0	—	—	Coal, bright, banded, very pyritic; sideritic at bottom.
skalie, swart, met glanskool by onderent	4	2	—	—	Shale, black, with bright coal at bottom.
skalie, swart.....	—	3	1,594	9	Shale, black.
glanskool, gelaag, met enkele skalielagies; onderste 2 dm. skalieagtig	2	3	1,597	0	Coal, bright, banded, with occa- sional shale bands; bottom 2 in. shaly.
skalie, swart, met wryfvlakke....	—	4	—	—	Shale, black, with slickensides.
glanskool, gelaag.....	1	0	—	—	Coal, bright, banded.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Skalie met skalieagtige steenkool naby bo-ent van band; wryfvlak in middel en naby onderent	1	8	—	—	Shale with shaly coal towards of band; slickenside in middle and near bottom.
Glanskool, gelaag, erg skalieagtig en sideriethoudend in onderste 8 dm.	1	7	—	—	Coal, bright, banded, very shaly and sideritic in bottom 8 in.
Skalie, swart, met vyf steenkool-lagies (1 dm.) en talryke wryf-vlakke	10	0	—	—	Shale, black, with five 1-in. coal-bands and numerous slickensides.
Glanskool, gelaag, skalieagtig, erg sideriethoudend in boonste helfte	2	0	—	—	Coal, bright, banded, shaly, and sideritic in top half.
Skalie, swart, met drie steenkool-lagies (5 dm. tot 10 dm.) en baie wryfvlakke	8	4	—	—	Shale, black, with three 5-in. to 10-in. coal-bands and many slickensides.
Skalie en steenkool, gemeng.....	3	7	—	—	Shale and coal, mixed.
Skalie, wryfvlak in middel.....	1	2	—	—	Shale, slickenside in middle.
Skalie, en steenkool, gemeng....	10	1	—	—	Shale and coal, mixed.
Skalielae, swart, breed, breë glanskoollae en breë skalieagtige glanskoollae om die beurt, met baie wryfvlakke en 25 dm. glanskool (met onderste 10 dm. skalieagtig en sideriethoudend) 4 vt. van onder af	37	1	1,674	9	Shale bands, black, broad, alternating with broad, bright coal-bands, and broad, shaly, bright coal-bands, many slickensides and 25 in. bright coal (within bottom 10 in. shaly and sideritic) 4 ft. from bottom.
Skalie, swart, en koolstofhoudende skalie, met veertien gemengde steenkool- en skalie bandjies (1 dm. tot 4 dm.) waarvan sommige sideriethoudend is	15	6	1,691	1	Shale, black, and carbonaceous shale, with fourteen 1-in. to 4-in. mixed coal and shale bands some of which are sideritic.
Skalie met tussengelaagde steenkool	2	4	—	—	Shale with interbedded coal.
Skalie, swart, en koolstofhoudende skalie, met 'n bietjie steenkoolagtige skalie, tien glanskool-lagies (2 dm. tot 8 dm.) en gemengde steenkool en skalie	26	0	1,720	0	Shale, black, and carbonaceous shale, with some coaly shaly bands and mixed coal and shale.
Glanskool, gelaag, met enkele dun skalielagies, piriethoudend	1	5	—	—	Coal, bright, banded, with a thin shale bands, pyritic.
Skalie, swart, en koolstofhoudende skalie, met ses steenkoollagies (1 dm. tot 4 dm.)	16	5	1,738	7	Shale, black, and carbonaceous shale, with six 1-in. to 4-in. coal-bands.
Skalie, koolstofhoudend, en steenkoolagtige skalie	11	0	—	—	Shale, carbonaceous, and coaly shale.
Matkool, skalieagtig, met enkele glanskoolstrepies	5	5	1,755	0	Coal, dull, shaly, with occasional bright coal-streaks.
Glanskoollae en gemengde, hoofsaaklik matkoollae om die beurt, kalsiet- en piriethoudend	5	0	—	—	Coal, bright bands, alternating with mixed, mainly dull coal-bands; calcitic and pyritic.
Steenkool, hoofsaaklik minderwaardige matkool wat na bo in skalie verander	3	4	1,763	4	Coal, mainly inferior, dull coal grading into shale towards top.
Skalie, ligbruin en vaal, kleiagtig, met baie wryfvlakke en plantafdrukke; sanderig na onder	1	10	1,765	2	Shale, light brown and gray clayey, with many slickensides and plant impressions; sandy towards bottom.

Bg. 115 (verv.)

B.H. 115 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
ndsteen, fyn- tot middelkorrel- rig, vaal, met baie vaalbruin, kleiagtige skalielagies en enkele wryfvlakke, plek-plek effens mikahoudend, fossielbevattend	3	0	—	—	Sandstone, fine- to medium- grained, grey, with many grey- brown, clayey shale bands and a few slickensides, slightly mica- ceous in parts; fossiliferous.
ndsteen, vaalwit, middel- tot grofkorrelrig	4	8	1,773	1	Sandstone, grey-white, medium- to coarse-grained.
alie, swart, en koolstofhoudende skalie, met 'n bietjie steenkool- agtige skalie en glanskool in onderste 18 dm.	13	4	1,786	5	Shale, black, and carbonaceous shale, with a little coaly shale and bright coal in bottom 18 in.
alie, swart, met steenkoolaartjies en baie ligkleurige, golfvormige agies; effens sanderig	3	9	1,790	2	Shale, black, with coal-stringers and many light-coloured, wavy laminae; slightly sandy.
alie, swart, koolstofhoudende skalie, en 'n bietjie steenkool- agtige skalie	7	0	1,797	2	Shale, black, carbonaceous shale, and a little coaly shale.
enkool, hoofsaaklik matkool..	1	8	1,798	10	Coal, mainly dull coal.
alie, swart, onderste 4 vt. effens bruinswart	11	0	—	—	Shale, black, bottom 4 ft. slightly brown-black.
alie, koolstofhoudend, en steen- koolagtige skalie	1	11	1,812	8	Shale, carbonaceous, and coaly shale.
enkool, minderwaardig by bot- om, origens sideriethoudend met in growwe, korrelrige voorkoms	2	11	—	—	Coal, dull, inferior at top, else- where sideritic with a coarse granular appearance.
enkool, hoofsaaklik matkool..	2	2	—	—	Coal, mainly dull coal.
enkool, gemeng, meer glansend by onderent, piriethoudend	1	10½	—	—	Coal, mixed, brighter at bottom, pyritic.
alie, steenkoolagtig.....	1	1	—	—	Shale, coaly.
enkool, hoofsaaklik matkool, met enkele groot pirietskollie en a sideriet- en piriethoudende steenkoolagie (2 dm.) 3 dm.	2	3	—	—	Coal, mainly dull coal, with occa- sional big pyrite nodules and a 2-in. sideritic and pyritic coal- band 3 in. from top.
an bo af	—	—	—	—	—
alie, koolstofhoudend, en skalie- agtige steenkool	—	10½	—	—	Shale, carbonaceous, and shaly coal.
enkool, hoofsaaklik matkool..	3	1	—	—	Coal, mainly dull coal.
enkool, sideriet- en piriethou- end	—	4	—	—	Coal, sideritic and pyritic.
enkool, hoofsaaklik matkool, lek-plek minderwaardig, piriethou- dend na onder	3	2	—	—	Coal, mainly dull coal, inferior in parts, pyritic towards bottom.
enkool, gemeng, dowwer na bo, piriethoudend	2	0	1,832	5	Coal, mixed, duller towards top, pyritic.
ndsteen, fynkorrelrig, gelaag, wartbruin, onderste 3 dm.	10	6	1,844	9	Sandstone, fine-grained, black- brown, bottom 3 in. gritty.
interig	—	—	—	—	—
alie, en sandsteen, koolstofhou- end	—	6	1,845	3	Shale and sandstone, carbona- ceous.
kool met glanskool by onder- nt	1	8	—	—	Coal, dull, with bright coal at bottom.
ndsteen, koolstofhoudend.....	—	10	—	—	Sandstone, carbonaceous.
nkool, gemeng, piriethoudend, et 'n kalsiethoudende lagie (dm.) en twee skalielagies van halfduim	4	7	—	—	Coal, mixed, pyritic, with a 1-in. calclitic band and two ½-in. shale bands.
nkool, gemeng, piriethoudend dm. kern verloor)	6	2	1,859	1	Coal, mixed, pyritic (7 in. core lost).

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	<i>Vt.</i> <i>Ft.</i>	<i>Dm.</i> <i>In.</i>	<i>Vt.</i> <i>Ft.</i>	<i>Dm.</i> <i>In.</i>	
Sandsteen, fyn bandjies plek-plek met golfvormige lagies, mikahoudend, bruinagtig, vaalwit, vaalbruin en swarterig	33	2	—	—	Sandstone, fine bands, with wavy layers in parts; micaceous brownish, grey-white, greenish brown and blackish.
Sandsteen, golfvormige lagies van swart, skalieagtige sandsteen en vuilvaal, middelkorrelrige tot veldspatiese lagies om die beurt	5	6	—	—	Sandstone, with alternating wavy layers of black, shaly sandstone and dirty grey medium-grained to gritty, slightly felspathic bands.
Sandsteen, vaalwit, middel- tot grofkorrelrig, effens veldspaties	1	4	—	—	Sandstone; grey-white, medium coarse-grained, slightly spathic.
Skalie, steenkoolagtig, ...		5	—	—	Shale, coaly.
Sandsteen, gelaag, erg fynkorrelrig, swart tot bruinswart	4	11	—	—	Sandstone, laminated, very fine-grained, black to brown-black.
Sandsteen, middelkorrelrig tot grintagtig, veldspaties, vuilvaal, plek-plek met fynkorrelrige lagies	3	9	1,913	9	Sandstone, medium-grained to gritty, felspathic, dirty-grey with fine-grained bands in parts.
Skalie, koolstofhoudend en matkool	1	7	1,915	4	Shale, carbonaceous, and dull.
Sandsteen, fyn- tot grofkorrelrig, plek-plek veldspaties, met enkele groterige spoelklippe met 'n middellyn tot $\frac{3}{4}$ dm.	8	8	1,924	0	Sandstone, fine- to coarse-grained, felspathic in parts, with occasional biggish pebbles up to $\frac{3}{4}$ in. in diameter.

BOORGAT 115 : GOEDEHOOP 1372 : BOREHOLE 115

an l.- ter I. no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth	Nature of strata	
	N.G. (moddersteen).....	Dm. In. —	Vt. Ft. 1,518	Dm. In. 10	N.S. (mudstone).
	Glanskool, gelaag, erg piriethoudend in boonste 6 dm. en erg skalieagtig en piriethoudend in onderste 4 dm., kalsiethoudend	31	—	—	Coal, bright, banded; very pyritic in top 6 in. and very shaly and pyritic in bottom 4 in., calcitic.
	N.G.....	64	—	—	N.S.
	Glanskool, gelaag, skalieagtig yeral in boonste en onderste gedeeltes van laag, piriethoudend kalsiethoudend	11	—	—	Coal, bright, banded, shaly especially towards the top and the bottom, pyritic and calcitic.
	N.G.....	5½	—	—	N.S.
	Glanskool, gelaag, skalieagtig in boonste 1 dm., piriethoudend	17½	—	—	Coal, bright, banded, shaly in top 1 in., pyritic.
	N.G.....	33	—	—	N.S.
	Glanskool, gelaag, skalieagtig	14	1,533	6	Coal, bright, banded, shaly.
	N.G.....	26	1,559	9	N.S.
	Glanskoollae en skalielae om die beurt	10	—	—	Coal-bands, bright, with alternating shale bands.
	Glanskool, gelaag, skalieagtig en piriethoudend	13	—	—	Coal, bright, banded, shaly and pyritic.
	Glanskool, gelaag, piriethoudend en effens sideriethoudend in onderste 15 dm.	33	—	—	Coal, bright, banded, pyritic and slightly sideritic in bottom 15 in.
	N.G.....	52	—	—	N.S.
	Glanskool, gelaag.....	15	—	—	Coal, bright, banded.
	Glanskool, gelaag, gemeng met skalie	4	—	—	Coal, bright, banded, mixed with shale.
	Glanskool, gelaag, piriethoudend, skalieagtig in onderste 4 dm.; 'n wryfvlak in middel	28	—	—	Coal, bright, banded, pyritic, shaly in bottom 4 in.; a slickenside in middle.
	N.G.....	19	—	—	N.S.
	Glanskool, gelaag.....	13	—	—	Coal, bright, banded.
	Glanskool, gelaag, en skalie..	7	—	—	Coal, bright, banded, and shale.
	Glanskool, gelaag.....	23	—	—	Coal, bright, banded.
	Skalie.....	1½	—	—	Shale.
	Glanskool, gelaag, vitrietagtig	10	—	—	Coal, bright, banded, vitrainous.
	Glanskool, gelaag, skalieagtig en erg kalsiethoudend	10	—	—	Coal, bright, banded, shaly and very calcitic.
	Glanskool, gelaag, erg piriethoudend (19 dm. kern verloor tussen 1,559 vt. 9 dm. en 1,582 vt. 3 dm.)	12½	1,582	3	Coal, bright, banded, very pyritic (19 in. core lost between 1,559 ft. 9 in. and 1,582 ft. 3 in.).
	N.G.....	3	1,594	9	N.S.
	Glanskool, gelaag, met enkele skalielagies, onderste 2 dm. skalieagtig	27	1,597	0	Coal, bright, banded, with occasional shale bands, bottom 2 in. shaly.

No. van B.N.L.- monster F.R.L. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth			Nature of strata
			Dm. In.	Ft.	Dm. In.	
S 333 C	N.G.....	312	1,720	0		N.S.
	Glanskool, gelaag, met enkele dun skalielagies, piriethou- dend	17	—			Coal, bright, banded, occasional thin shale bands pyritic.
	N.G.....	197	—			N.S.
	N.G.....	132	—			N.S.
	N.G.....	65	1,755	0		N.S.
	B Glanskoollae en gemengde, hoofsaaklik matkoollae, om die beurt, kalsiet- en piriethou- dend	60	—			Coal, bright bands, altern- ing with mixed mainly dull bands; calcitic and pyritic
	N.G.....	130	1,773	1		N.S.
	N.G.....	289	1,797	2		N.S.
	A Steenkool, hoofsaaklik mat- kool	20	1,798	10		Coal, mainly dull coal.
S 334 F	N.G.....	23	1,812	8		N.S.
	Matkool, minderwaardig by bo-ent, origens sideriethou- dend met 'n growwe, korrel- rige voorkoms	35	—			Coal, dull, inferior at elsewhere sideritic with coarse, granular appearance
	E { Steenkool, hoofsaaklik mat- kool	26	—			Coal, mainly dull coal.
	Steenkool, gemeng, meer glan- send by onderent; piriethou- dend	22½	—			Coal, mixed, brighter at top, pyritic.
	D N.G.....	13	—			N.S.
	Steenkool, hoofsaaklik mat- kool, met enkele groot pirietknolle en 'n sideriet- en piriethoudende steen- koollagie (2 dm.) 3 dm. van bo af	27	—			Coal, mainly dull, with oc- casional big pyrite nodules a 2-in. sideritic and pyritic coal-band 3 in. from top
	C N.G.....	10½	—			N.S.
	Steenkool, hoofsaaklik mat- kool	37	—			Coal, mainly dull.
	B N.G.....	4	—			N.S.
	Steenkool, hoofsaaklik mat- kool, plek-plek minder- waardig, piriethoudend in onderent van laag	38	—			Coal, mainly dull, inferior parts, pyritic towards top.
	A Steenkool, gemeng, dowwer in bo-ent van laag; piriethou- dend	24	1,832	5		Coal, mixed, duller towards top, pyritic.
S 335 C	N.G.....	6	1,845	3		N.S.
	Matkool met glanskool by onderent	20	—			Coal, dull, bright, at bottom
	N.G.....	10	—			N.S.
	B Steenkool, gemeng, piriethou- dend, met 'n kalsiethouden- de lagie (1 dm.) en twee skalielagies van 'n halfduim	55	—			Coal, mixed, pyritic, with 1-in. calcitic band and ½-in. shale bands.
	A Steenkool, gemeng, piriethou- dend (7 dm. kern verloor)	74	1,859	1		Coal, mixed, pyritic (7 in. lost).

No. van B.N.I.-monster F.R.I. sample no.	Dikte (Dm.) THICKNESS (IN.)		RU-STEENKOOL RAW COAL						WASTOETS WASHING TEST		DRY-STOP FLOAT						SINK- STOP SINK	
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	Groot- te (Dm.) Size (In.)	S.G.	Op- brengs Yield %	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	As Ash %
S 188 C	— 64	31	—	—	23.3	—	—	—	$-\frac{3}{16}$	1.40	56.0	—	2.3	13.2	38.4	46.1	3½	36.2
B	5½ 33	28½	—	—	26.3	—	—	—	$-\frac{3}{16}$	1.40	42.0	—	2.7	13.0	34.8	49.5	5½	36.0
A	—	14	—	2.1	27.0	32.0	38.9	4	$-\frac{3}{16}$	1.40	37.6	—	—	—	—	—	—	—
D	315	56	—	—	29.4	—	—	—	$-\frac{3}{16}$	1.40	42.5	—	2.3	11.0	36.5	50.2	4½	43.0
C	52	47	—	—	23.7	—	—	—	$-\frac{3}{16}$	1.40	47.2	—	2.4	10.2	36.3	51.1	5½	35.7
B	19	54½	—	—	21.4	—	—	—	$-\frac{3}{16}$	1.40	63.7	—	2.3	9.3	36.8	51.6	4½	42.5
A	—	22½	—	—	25.6	—	—	—	$-\frac{3}{16}$	1.40	42.7	—	2.4	11.6	36.7	49.3	4½	36.1
S 191 A	150	27	—	—	27.8	—	—	—	$-\frac{3}{16}$	1.40	35.3	—	2.2	14.5	35.4	47.9	4½	35.0
S 333 C	1,476 403	17	12.4	2.0	14.0	35.0	49.0	4	—	—	—	—	—	—	—	—	—	—
B	—	60	—	—	31.3	—	—	—	—1	1.35 1.35 1.58*	17.6 27.3 44.9*	14.0 11.7 12.6*	2.2 2.2 2.2*	6.3 18.6 13.8*	34.6 28.5 30.9*	56.9 50.7 53.1*	4½ 14g	45.5
A	446 166	20	—	—	35.4	—	—	—	—	—	—	—	—	—	—	—	—	—

* Bereken / Calculated.

Bg. 115 (verv.)

B.H. 115 (contd.)

No. van B.N.I.-monster F.R.I. sample no.	Dikte (Dm.) Thickness (In.)		RU-STEEKKOL RAW COAL						WASTOETS WASHING TEST		DRYSTOF FLOAT						SINK- STOF SINK	
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	Groot- te (Dm.) Size (In.)	S.G.	Op- brengs Yield %	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	
S 334	F	35	—	—	27.3	—	—	—	—1	1.58	37.6	11.4	2.3	17.7	20.2	59.8	P	33.1
	E	48½	13	—	13.6	—	—	—	—1	1.58	89.4	12.9	2.4	10.8	24.2	62.6	1Ag	37.6
	D	27	10½	—	29.8	—	—	—	—1	1.58	47.8	11.5	2.1	19.0	20.3	58.6	F	39.6
	C	37	4	—	29.5	—	—	—	—1	1.58	43.0	10.9	2.2	22.4	17.0	58.4	F	34.8
	B	38	—	—	25.9	—	—	—	—1	1.58	66.5	11.3	2.4	20.1	17.3	60.2	P	37.2
S 335	A	24	154	—	16.4	—	—	—	—1	1.58	87.4	12.7	2.7	11.7	22.9	62.7	P	49.0
	C	20	—	—	30.0	—	—	—	—	—	—	—	—	—	—	—	—	—
	B	55	10	—	20.2	—	—	—	—1	1.58	78.0	12.5	2.1	13.8	24.0	60.1	1Ag	43.0
A	74	—	—	18.3	—	—	—	—	—1	1.58	84.6	12.5	2.2	13.8	25.1	58.9	1Ag	43.3

BOORGAT 116 : STELLENBOSCH 948 : BOREHOLE 116

Kern 2½ dm.

Core 2½ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
rond en sandsteen.....	10	6	10	6	Soil and sandstone.
ndsteen, fyn- tot middelkorrel- rig, witterig, taamlik massief (Moltenolae)	5	8	—	—	Sandstone, fine- to medium- grained, whitish, fairly massive (Molteno Beds).
oddersteen, perserig sjokolade- bruin en vaal	42	9	78	0	Mudstone, purplish chocolate- brown and grey.
oddersteen (stampboor).....	41	0	—	—	Mudstone (jump-drill).
oddersteen, vaal tot blouvaal by bo-ent, plek-plek pers, word donkerkleurig na onder waar dit vaalswart is, enkele wryf- vlakke naby onderent	21	6	140	6	Mudstone, grey to blue-grey at top, with purple patches in parts, becomes dark-coloured towards bottom where it is grey-black, occasional slicken- sides near bottom.
lanskool, gelaag, met 'n skalie- agtige lagie (1 dm.) 9 dm. van bo af en 1 dm. skalie by onderent	1	2	—	—	Coal, bright, banded, with a 1-in. shaly band 9 in. from top and 1 in. shale at bottom.
alie, swart, en koolstofhoudende skalie, met enkele dun steenkool- bandjies	5	4	—	—	Shale, black, and carbonaceous shale, with occasional thin coal- bands.
lanskool, gelaag, met 'n erg piriethoudende bandjie (9 dm.) 9 dm. van bo af en 4 dm. skalie 27 dm. van bo af	3	2	—	—	Coal, bright, banded, with a 9-in. very pyritic band 9 in. from top and 4 in. shale 27 in. from top.
alie, swart, met 14 dm. tussen- gelaagde steenkool en skalie by onder- en bo-ent	5	10	—	—	Shale, black, with 14 in. inter- bedded coal and shale at bottom and top.
lanskool, gelaag, plek-plek skalie- agtig	1	7	—	—	Coal, bright, banded, shaly in parts.
alie, swart.....	—	10	—	—	Shale, black.
lanskool, gelaag, met baie skalie- lagies	1	5	—	—	Coal, bright, banded, with many shale bands.
alie, swart.....	2	2	—	—	Shale, black.
lanskool, gelaag, en gelaagde skalieagtige glanskoollae om die beurt	5	8	—	—	Coal, bright, banded, alternating with shaly, banded, bright coal.
alie, vaalswart, met twee dun steenkoollagies en enkele wryf- vlakke naby onderent	5	4	173	0	Shale, grey-black, with two thin coal-bands and a few slicken- sides near bottom.
lanskool, gelaag, skalieagtig, met twee wryfvlakke in middel	1	8	—	—	Coal, bright, banded, shaly, with two slickensides in middle.
alie, swart, met 'n wryfvlak...	—	5	—	—	Shale, black, with a slickenside.
lanskool, gelaag, met 1½ dm. skalie 2½ dm. van bo af	—	7	—	—	Coal, bright, banded, with 1½ in shale 2½ in. from top.
alie, swart.....	—	5	—	—	Shale, black.
lanskool, gelaag, plek-plek skalie- agtig, met 2 dm. skalie 11 dm. van bo af, pirietsluitels 39 dm. van bo af en 8 dm. van onder af	5	2	181	3	Coal, bright, banded; shaly in parts, with 2 in. shale 11 in. from top; pyrite inclusions 39 in. from top and 8 in. from bottom.
alie, swart, met drie steenkool- lagies van 'n halfduim en wryf- vlakke by bo- en onderent	3	10	185	1	Shale, black, with three 2-in. coal- bands and slickensides at top and bottom.
lanskool, gelaag, met 2 dm. skalie 3 dm. van bo af	—	9	—	—	Coal, bright, banded, with 2 in. shale 3 in. from top.
alie, swart.....	1	4	187	2	Shale, black.
lanskool, gelaag, effens skalie- agtig en plek-plek piriethou- dend, 1 dm. skalie 25 dm. van bo af	3	11	—	—	Coal, bright, banded, slightly shaly and pyritic in parts, 1 in. shale 25 in. from top.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Glanskool , gelaag, en skalieagtige, gelaagde glanskoolae om die beurt; ses skalielagies van 1 tot 2 dm.; plek-plek piriethoudend	3	9	—	—	Coal , bright, banded, alternating with bands of shaly, banded bright coal; six 1-in. to 2-in. shale bands pyritic in parts.
Glanskool , gelaag, effens sideriet-houdend by onderent, pirietskool 7 dm. van bo af	3	1	—	—	Coal , bright, banded, slightly sideritic at base, pyrite nodules 7 in. from top.
Glanskool , gelaag, en swart skalie-lae om die beurt		10	198	9	Coal , bright, banded, alternating with black shale bands.
Skalie, vaalswart tot swart, met baie verspreide kwartskorrels waarvan sommige 'n diameter van 2 mm. bereik; enkele wryf-vlakke	29	5	228	2	Shale, grey-black to black, with many scattered quartz grains up to 2 mm. in diameter, occasional slickensides.
Glanskool , gelaag, erg skalieagtig in boonste 9 dm., effens sideriet-houdend in onderste 4 dm. en erg kalsiethoudend in onderste 2 dm.	1	9	229	11	Coal , bright, banded, very shaly in top 9 in., slightly sideritic in bottom 4 in. and very calcitic in bottom 2 in.
Skalie, swart, en koolstofhoudende skalie met enkele dun bandjies tussengelaagde skalie en steenkool	35	0	—	—	Shale, black, and carbonaceous shale, with an occasional thin band of interbedded shale and coal.
Moddersteen, ligbruin tot vaalbruin, onderste helfte vaalbruin	15	2	280	1	Mudstone, light brown to grey-brown, bottom half grey-brown.
Sandsteen, vaalwit, erg fynkorrelrig, met enkele dun moddersteenbandjies	2	0	—	—	Sandstone, grey-white, very fine-grained, with occasional thin mudstone bands.
Moddersteen, ligvaal.....		9	—	—	Mudstone, light grey.
Glanskool		1	—	—	Coal , bright.
Skalie, koolstofhoudend.....		2	—	—	Shale, carbonaceous.
Skalie, swart, sanderig.....	1	0	—	—	Shale, black, sandy.
Sandsteen, kleiagtig, vaalgeel, onderste 2 vt. swart	9	6	293	7	Sandstone, clayey, buff-coloured, bottom 2 ft. black.
Moddersteen, vaalgroen, met baie bruin karbonaatspikkels en sandsteentussenlagies naby bo-ent	11	0	—	—	Mudstone, grey-green, with many brown carbonate specks and sandstone intercalations near top.
Moddersteen, vaal, sanderig.....	5	10	—	—	Mudstone, grey, sandy.
Sandsteen, arkosies.....	37	0	347	5	Sandstone, arkosic.
Bosveldgraniet.....	21	6	368	11	Bushveld granite.

BOORGAT 116 : STELLENBOSCH 948 : BOREHOLE 116

o. van N.I.- onster R.I. ple no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
			Vt. Ft.	Dm. In.	
195	N.G.....	Dm. 258	140	6	N.S.
G	Glanskool, gelaag, met 'n skaliegagtige lagie (1 dm.) 9 dm. van bo af en 1 dm. skalie by onderent	14	—	—	Coal, bright, banded, with a 1-in. shaly band 9 in. from top and 1 in. shale at bottom.
F	N.G.....	64	—	—	N.S.
	Glanskool, gelaag, met 'n erg piriethoudende lagie (9 dm.) 9 dm. van bo af, 4 dm. skalie 27 dm. van bo af uitgesluit	38	—	—	Coal, bright, banded, with a 9 in. very pyritic band 9 in. from top, 4 in. shale 27 in. from top excluded.
E	N.G.....	70	—	—	N.S.
	Glanskool, gelaag, plek-plek skaliegagtig	19	—	—	Coal, bright, banded, shaly in parts.
D	N.G.....	10	—	—	N.S.
	Glanskool, gelaag, met baie skaliebandjies	17	—	—	Coal, bright, banded, with many shale bands.
C	N.G.....	26	—	—	N.S.
	Glanskool, gelaag, afwisselend met skaliegagtige, gelaagde glanskoollae	68	—	—	Coal, bright, banded, alterna- ting with shaly, banded, bright coal-bands.
B	N.G.....	64	—	—	N.S.
	Glanskool, gelaag, skaliegagtig, met twee glyvakke in middel	20	—	—	Coal, bright, banded, shaly, with two slip planes in middle.
	N.G.....	5	—	—	N.S.
A	Glanskool, gelaag, met 1½ dm. skalie 2½ dm. van bo af	7	—	—	Coal, bright, banded, with 1½ in. shale 2½ in. from bottom.
	N.G.....	5	—	—	N.S.
	Glanskool, gelaag, plek-plek skaliegagtig, met 2 dm. skalie 11 dm. van bo af, piriet- insluitsels 39 dm. van bo en 8 dm. van onder af	62	181	3	Coal, bright, banded; shaly in parts, with 2 in. shale 11 in. from top, pyrite inclusions 39 in. from top and 8 in. from bottom.
96	N.G.....	16	187	2	N.S.
E	Glanskool, gelaag, effens ska- lieagtig en plek-plek piriet- houdend, 1 dm. skalie 25 dm. van bo af	47	—	—	Coal, bright, banded, slightly shaly and pyritic in places, 1 in. shale 25 in. from top.
D	Glanskool, gelaag, en skalie- agtige gelaagde glanskool om die beurt, met ses skalie- lagies (1 dm. tot 2 dm.); plek-plek piriethoudend	45	—	—	Coal, bright, banded, alterna- ting with bands of shaly banded, bright coal and with six 1-in. to 2-in. shale bands; pyritic in parts.
C	Glanskool, gelaag, effens sidi- erithoudend by onderent, pirietknol 7 dm. van bo af	37	—	—	Coal, bright, banded; slightly sideritic at base; pyritic nodule 7 in. from top.
B	Glanskool, gelaag, en skalielae om die beurt	10	198	9	Coal, bright, banded, alterna- ting with shale bands.
A	N.G.....	353	228	2	N.S.
	Glanskool, gelaag, erg skalie- agtig in boonste 9 dm., effens sideriethoudend in onderste 4 dm., en erg kalsiethou- dend in onderste 2 dm.	21	229	11	Coal, bright, banded, very shaly in top 9 in., slightly sideritic in bottom 4 in. and very calcitic in bottom 2 in.

BOORGAT 117 : ELANDSBOSCH 714 : BOREHOLE 117

Kern $3\frac{1}{2}$ dm.Core $3\frac{1}{2}$ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sand en oppervlakkalksteen (stampboor)	148	0	148	0	Sand and surface-limestone (jump-drill).
Moddersteen, vaal, vaalblou, plek- plek liggeel en verweer; ook plek-plek ligpers in boonste helfte	195	0	345	7	Mudstone, grey, grey-blue, light yellow and weathered in places, light purple in parts in the top half.
Skalie, swart, donkervaal, kleierig	1	6	347	1	Shale, black, dark grey, clayey.
Glanskool, gelaag, piriethoudend in boonste 1 dm. en $1\frac{1}{2}$ dm. skalie 10 dm. van bo af, skalie- agtig by bo- en onderent, kalsiet- houdend	1	11	—	—	Coal, bright, banded, pyritic in top 1 in. and $1\frac{1}{2}$ in. shale 10 in. from top, shaly at top and bottom calcitic.
Skalie, vaal tot donkervaal, kleierig	6	0	—	—	Shale, grey to dark grey, clayey.
Glanskool, gelaag.....	1	1	—	—	Coal, bright, banded.
Skalie.....	—	5	—	—	Shale.
Glanskool, gelaag, skalieagtig, kalsiet- en piriethoudend (4 dm. kern verloor)	—	8	—	—	Coal, bright, banded, shaly, calci- tic and pyritic (4 in. core lost).
Skalie, vaal tot donkervaal, kleierig	3	4	360	10	Shale, grey to dark grey, clayey.
Glanskool, gelaag, plek-plek skalie- agtig veral in boonste gedeelte	1	10	—	—	Coal, bright, banded, shaly in parts especially in top portion.
Skalie.....	—	3	—	—	Shale.
Glanskool, gelaag, met baie skalie- bandjies (5 dm. te veel kern tussen 360 vt. 10 dm. en 363 vt. 2 dm.)	—	8	363	2	Coal, bright, banded, with many shale bands (5 in. core in excess between 360 ft. 10 in. and 363 ft. 2 in.).
Skalie, vaal, kleierig.....	3	0	—	—	Shale, grey, clayey.
Glanskool, gelaag, skalieagtig by bo- en onderent, piri- en effens kalsiethoudend	1	9	—	—	Coal, bright, banded, shaly at top and bottom, pyritic and slightly calcitic.
Skalie, met 'n lagie gemengde steenkool en skalie (6 dm.), 4 dm. van bo af	1	$1\frac{1}{2}$	—	—	Shale, with a 6-in. band mixed coal and shale 4 in. from top.
Steenkool en skalie, gemeng, met 2 dm. skalie 16 dm. van onder af, piriethoudend en kalsiethou- dend	2	9	372	0	Coal and shale, mixed, with 2 in. shale 16 in. from bottom, pyritic and calcitic.
Skalie, donkervaal tot vaalswart, kleierig	3	3	—	—	Shale, dark grey to grey black, clayey.
Skalie, swart, met 7 dm. glanskool by bo-ent en gemengde steen- kool en skalie by onderent	3	4	—	—	Shale, black, with 7 in. bright coal at top and mixed coal and shale at bottom.
Skalie en steenkool, met twee skalielagies van 2 dm.	3	7	—	—	Shale and coal, with two 2-in. shale bands.
Skalie, swart, met 'n paar duim gemengde steenkool en skalie in middel	2	3	—	—	Shale, black, with a few inches mixed coal and shale in middle.
Skalielae, breed, en tussengelaagde skalie- en steenkoolae	2	9	—	—	Shale bands, broad, and inter- bedded shale and coal-bands.
Skalie, swart, met baie dun steen- koolbandjies	2	10	390	0	Shale, black, with many thin coal- bands.
Skalie en steenkool, gemeng, piri- ethoudend	—	9	—	—	Shale and coal, mixed, pyritic.
Glanskool, gelaag, met baie dun skaliebandjies	1	$4\frac{1}{2}$	—	—	Coal, bright, banded with many thin shale bands.
Glanskool, gelaag, kalsiethoudend, effens piriethoudend naby bo-ent	2	$2\frac{1}{2}$	—	—	Coal, bright, banded, calcitic, slightly pyritic near top.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Skalie en steenkool, gemeng (15 dm. te veel kern tussen 390 vt. en 393 vt. 5 dm.)		4	393	5	Shale and coal, mixed (15 in. core in excess between 390 ft. and 393 ft. 5 in.).
Skalie, swart.....	1	5	394	10	Shale, black.
Skalielae, glanskoolae, en skalie- lae met steenkoolaartjies om die beurt	4	2½	—	—	Shale bands, alternating with bright coal-bands, and shale bands with coal-stringers.
Glanskool, gelaag, met 'n paar dun skalielagies veral in onderste gedeelte, piriethoudend in mid- del, kalsiethoudend in boonste gedeelte	1	8½	—	—	Coal, bright, banded, with a few thin shale bands especially in bottom portion, pyritic in middle, calcitic in top portion.
Skalie en gelaagde glanskool, gemeng	1	4	—	—	Shale and banded, bright coal, mixed.
Glanskool, gelaag, met drie 1 dm. skalielagies (1 dm.) 11½ dm., 32 dm. en 50 dm. van bo af onderskeidelik, piriethoudend in boonste en kalsiethoudend in onderste gedeeltes (9½ dm. kern verloor tussen 394 vt. 10 dm. en 408 vt. 2 dm.)	5	3½	408	2	Coal, bright, banded with three 1-in. shale bands 11½ in., 32 in. and 50 in. from top respectively. pyritic in top portion sideritic in bottom portion (9½ in. core lost between 394 ft. 10 in. and 408 ft. 2 in.).
Skalie, swart.....	1	4	409	6	Shale, black.
Glanskool, gelaag, met 'n paar dun skalielagies en ½ dm. skalie in middel, effens piriethoudend		10½	—	—	Coal, bright, banded, with a few thin shale bands and ½ in. shale in middle, slightly pyritic.
Skalie met dun steenkoolaartjies.		7½	—	—	Shale with thin coal-stringers.
Glanskool, gelaag, piriethoudend in middel, effens kalsiethoudend	1	7	—	—	Coal, bright, banded, pyritic in middle, slightly calcitic.
Skalie.....		8	—	—	Shale.
Glanskool, gelaag (kern erg ge- breek en 1½ dm. word vermis)	1	1½	414	6	Coal, bright, banded (core badly broken and 1½ in. missing).
Skalie, swart, met enkele dun steenkoolbandjies	2	5	—	—	Shale, black, with a few thin coal-bands.
Glanskool, gelaag, effens skalie- agtig, piriethoudend veral in onderste gedeelte	4	4	—	—	Coal, bright, banded, slightly shaly, pyritic especially in bot- tom portion.
Glanskool, gelaag, met 'n erg side- riethoudende laag (6 dm.) 7 dm. van onder af, 'n soortgelyke lagie (2½ dm.) 24 dm. van onder af en twee soortgelyke lagies (1 dm.) naby bo-ent, piriethoudend	2	10	—	—	Coal, bright, banded, with a 6-in. very sideritic band 7 in. from bottom, a similar 2½-in. band 24 in. from bottom and two similar 1-in. bands near top pyritic.
Skalie, met sideriet by onderent (24 dm. kern verloor tussen 414 vt. 6 dm. en 426 vt. 7 dm.)		6	426	7	Shale, with siderite at bottom (24 in. core lost between 414 ft. 6 in. and 426 ft. 7 in.).
Skalie, swart.....	3	11½	—	—	Shale, black.
Glanskool, gelaag, effens piriet- en kalsiethoudend in die boonste en onderste gedeeltes, 1 dm. skalie 5 dm. van bo af	2	8½	433	2	Coal, bright, banded, slightly pyritic and calcitic in top and bottom portions, 1 in. shale 5 in. from top.
Skalie, swart.....	2	11	436	1	Shale, black.
Glanskool, gelaag, effens skalie- agtig		10	—	—	Coal, bright, banded, slightly shaly.
Skalie en steenkool.....	1	8	—	—	Shale and coal.
Glanskool, gelaag, met baie dun skaliebandjies en 'n skalielagie (2 dm.) 4 dm. van bo af	3	0	—	—	Coal, bright, banded, with many thin shale bands and a 2-in. shale band 4 in. from top.
Skalie en steenkool.....	1	1	—	—	Shale and coal.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Skalie en steenkool, gemeng. . . .	1	3	—	—	Shale and coal, mixed.
Glanskool, gelaag, met baie skalie- bandjies en 1½ dm. skalie 13 dm. van bo af, en 2 dm. skalie 26 dm. van bo af	3	8	447	7	Coal, bright, banded, with many shale bands and 1½ in. shale 13 in. from top and 2 in. shale 26 in. from top.
Skalie en steenkool, gemeng, met 'n paar dun steenkoolbandjies, plek-plek sideriethoudend	3	5	—	—	Shale and coal, mixed, with a few thin coal-bands, sideritic in parts.
Skalie, en steenkool, gemeng, met 'n paar breë skaliebande	7	0	—	—	Shale and coal, mixed, with a few broad shale bands.
Skalie, swart, met agt glanskool- lagies van 1 tot 4 dm. (2½ dm. kern van hier af)	6	6	—	—	Shale, black, with eight 1-in. to 4-in. bright coal-bands (2½ in. core from here).
Skalie en steenkoolbandjies om die beurt	17	8	—	—	Shale and coal-bands, alternating.
Skalie, swart, met ses 1 dm. tot 6 dm. steenkoolagies; versprei- de kwartskorrels in boonste 8 vt.	36	5	—	—	Shale, black, with six 1-in. to 6-in. coal-bands; scattered quartz grains in top 8 ft.
Sandsteen, swart.	1	1	519	8	Sandstone, black.
Sandsteen, grofkorrelrig, vuilwit, veldspaties	1	6	—	—	Sandstone, coarse-grained, dirty white, felspathic.
Skalie, swart tot vaalswart, met 'n paar dun steenkoolagies; plek- plek verspreide kwartskorrels waarvan sommige 'n diameter van 2 mm. bereik	8	1	—	—	Shale, black to grey-black, with a few thin coal-bands, and with scattered quartz grains up to 2 mm. in diameter in places.
Sandsteen, grofkorrelrig, koolstof- houdend	6	—	—	—	Sandstone, coarse-grained, carbo- naceous.
Skalie, vaal en swart, met steen- koolagies van 2 dm.; onderste helfte sanderig	5	1	—	—	Shale, grey and black, with 2-in. coal-bands; bottom half sandy.
Skalie, koolstofhoudend, met 6 dm. glanskool naby bo-ent	6	3	—	—	Shale, carbonaceous, with 6 in. bright coal near top.
Skalie, swart, met baie kwarts- korrels waarvan sommige 'n diameter van 4 mm. bereik	1	10	—	—	Shale, black, with many quartz grains up to 4 mm. in diameter.
Skalie, swart, en koolstofhoudende skalies, met enkele steenkool- agtige lagies	38	3	—	—	Shale, black, and carbonaceous shale, with a few coaly shale bands.
Sandsteen, fynkorrelrig, vuilwit, skaliegagtig in middel	1	2	—	—	Sandstone, fine-grained, dirty white, shaly in middle.
Sandsteen, fynkorrelrig, vaalbruin, plek-plek grofkorrelrig in onder- ste gedeelte	8	7	—	—	Sandstone, fine-grained, grey- brown, coarse-grained in parts in bottom portion.
Skalie, swart, en koolstofhoudende skalies, plek-plek effens bruine- rig, met 3 dm. glanskool naby onderent	11	6	604	0	Shale, black, and carbonaceous shale, slightly brownish in parts, with 3 in. bright coal near bottom.
Skalie, koolstofhoudend, en steen- koolagtige skalies, met baie min glanskool in boonste helfte en min matkool in onderste helfte	19	4	—	—	Shale, carbonaceous, and coaly shale, with very little bright coal in top half and a little dull coal in bottom half.
Skalie, koolstofhoudende en steen- koolagtige skalies, met swaar matkool en 'n bietjie glanskool in onderste gedeelte	9	3	632	8	Shale, carbonaceous, and coaly shale, with heavy dull coal and a little bright coal in bottom portion.
Skalie, bruin, sanderig.	10	—	—	—	Shale, brown, sandy.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sandsteen, erg fynkorrelrig, vaal-bruin, donkerbruin, mikahoudend, met tekens van gelaagdheid in onderste helfte	15	2	—	—	Sandstone, very fine-grained, greyish brown, dark-brown, micaceous with signs of lamination in bottom half.
Sandsteen, veldspaties, massief, wit tot vuilwit, fyn- tot grofkorrelrig	35	9	684	5	Sandstone, felspathic, massive white to dirty white, fine- to coarse-grained.
Matkool, plek-plek skalieagtig, met baie min glanskoolaartjies; glanskool in onderste gedeelte; 14 dm. sideriethoudende steenkool 12 dm. van onder af, 3 dm. skalie 39 dm. van bo af en 1½ dm. skalie 49 dm. van bo af; effens piriethoudend	8	1	692	6	Coal, dull, shaly in places, with very few bright coal-stringers; bright coal in bottom portion; 14 in. sideritic coal 12 in. from bottom, 3 in. shale 39 in. from top and 1½ in. shale 49 in. from top; slightly pyritic.
Sandsteen, erg fynkorrelrig, plek-plek gelaag, vuilvaal tot vaal-bruin, mikahoudend	10	4	702	10	Sandstone, very fine-grained, laminated in parts, dirty grey to greyish brown, micaceous.
Steenkool, gemeng, en koolstofhoudende skalie	8	—	703	6	Coal, mixed, and carbonaceous shale.
Steenkool, gemeng, hoofsaaklik matkool, met 2 dm. skalie 9 dm. van bo af, 'n sideriet- en piriethoudende laag (7 dm.) 30 dm. van bo af en ½ dm. skalie 13 dm. van onder af	4	9	—	—	Coal, mixed, mainly dull coal with 2 in. shale 9 in. from top and a 7-in. sideritic and pyritic band 30 in. from top and ½ in. shale 13 in. from bottom.
Skalie, koolstofhoudend.....	7	—	—	—	Shale, carbonaceous.
Steenkool, gemeng, skalieagtige steenkool en steenkoolagtige skalie, met koolstofhoudende skalielae	3	8	—	—	Coal, mixed, shaly coal and coal shale, with carbonaceous shale bands.
Matkool, met 'n bietjie glanskool by bo-ent, onderent en in middel, en 'n paar dun skalielagies; 3 dm. skalie 30 dm. van bo af en 2 dm. piriet 25 dm. van bo af	4	5	717	0	Coal, dull, with a little bright coal at top, bottom and in middle and a few thin shale bands 3 in. shale 30 in. from top and 2 in. pyrite 25 in. from top.
Skalie, vaal en swart, met heelwat sandsteenlagies naby onder- en bo-ent	10	3	—	—	Shale, grey and black, with many sandstone bands near bottom and top.
Sandsteen, swart, skalieagtig, veldspaties en vuilwit by bo-ent	5	1	—	—	Sandstone, black, shaly, felspathic and dirty white at top.
Sandsteen, middel- tot grofkorrelrig, veldspaties, wit, plek-plek golfvormig gelaag, met koolstofhoudende lagies	13	1	—	—	Sandstone, medium- to coarse-grained, felspathic, white, wavy banded in parts, with carbonaceous shale bands.
Sandsteen, fynkorrelrig, dunge-streep, bruin, effens mikahoudend	6	6	—	—	Sandstone, fine-grained, thinly banded, brown, slightly micaceous.
Sandsteen, middel- tot grofkorrelrig, veldspaties, wit	15	9	—	—	Sandstone, medium- to coarse-grained, felspathic, white.
Sandsteen, fynkorrelrig, dunge-streep, bruin, effens mikadraend	5	8	773	11	Sandstone, fine-grained, thinly banded, brown, slightly micaceous.
Skalie, swart, plek-plek sanderig, met baie golfvormige bandjies en strepies	13	4	—	—	Shale, black, sandy in parts, with many wavy bands and streaks.
Skalie, swart, met 'n paar dun sandsteenlagies en verspreide kwartskorrels	13	4	805	5	Shale, black, with a few thin sandstone bands and scattered quartz grains.

BOORGAT 117 : ELANDSBOSCH 714 : BOREHOLE 117

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
			Dm. In.	Vt. Ft.	
S 548	N.G.....	18	347	1	N.S.
D	Glanskool, gelaag, piriethou- dend in boonste 1 dm. en 1½ dm. skalie 10 dm. van bo af, skalieagtig by bo- en onderent, kalsiethoudend	23	349	0	Coal, bright, banded, pyritic in top 1 in. and 1½ in. shale 10 in. from top, shaly at top and bottom, calcitic.
C	N.G.....	142	360	10	N.S.
	Glanskool, gelaag, plek-plek skalieagtig veral in boonste gedeelte	22	—	—	Coal, bright, banded, shaly in parts especially in top portion.
B	N.G.....	49	—	—	N.S.
	Glanskool, gelaag, skalieagtig by bo- en onderent, piri- et- en effens kalsiethoudend	21	—	—	Coal, bright, banded, shaly at top and bottom, pyritic and slightly calcitic.
A	N.G.....	13½	—	—	N.S.
	Steenkool en skalie, gemeng, met 2 dm. skalie 16 dm. van onder af, piri- et- en kalsiet- houdend	33½	372	0	Coal, and shale, mixed, with 2 in. shale 16 in. from bot- tom, pyritic and calcitic.
S 549	N.G.....	9	390	9	N.S.
D	Glanskool, gelaag, met baie dun skaliebandjies	16½	—	—	Coal, bright, banded, with many thin shale bands.
C	Glanskool, gelaag, kalsiethou- dend en effens piriethou- dend naby bo-ent	26½	—	—	Coal, bright, banded, calcitic and slightly pyritic near top.
	N.G. (15 dm. te veel kern tussen 390 vt. 9 dm. en 393 vt. 5 dm.)	4	393	5	N.S. (15 in. core in excess between 390 ft. 9 in. and 393 ft. 5 in.).
B	N.G.....	67½	—	—	N.S.
	Glanskool, gelaag, met 'n paar dun skalielagies veral in on- derste gedeelte; piriethou- dend in middel, kalsiethou- dend in boonste gedeelte	20½	—	—	Coal, bright, banded, with a few thin shale bands espe- cially in bottom portion; pyritic in middle, calcitic in top portion.
A	N.G.....	16	—	—	N.S.
	Glanskool, gelaag, met drie 1 dm. skalielagies 11½ dm., 32 dm. en 50 dm. van bo af, piriethoudend in boonste gedeelte, kalsiethoudend in onderste gedeelte	63½	408	2	Coal, bright, banded with three 1-in. shale bands 11½ in., 32 in. and 50 in. from top, pyritic in top portion, calcitic in bottom portion.
S 550	N.G.....	16	409	6	N.S.
F	Glanskool, gelaag, met 'n paar dun skalielagies en ½ dm. skalie in middel, effens piriethoudend	10½	—	—	Coal, bright, banded, with a few thin shale bands and ½ in. shale in middle, slightly pyritic.
	N.G.....	7½	—	—	N.S.
E	Glanskool, gelaag, piriethou- dend in middel, effens kal- siethoudend	19	—	—	Coal, bright, banded, pyritic in middle, slightly calcitic.
	N.G.....	8	—	—	N.S.
D	Glanskool, gelaag (kern erg gebreek en 1½ dm. word vermis)	13½	—	—	Coal, bright, banded (core badly broken and 1½ in. missing).
	N.G.....	29	—	—	N.S.

Bg. 117 (verv.)

B.H. 117 (contd.)

No. van B.N.I.- monster F.R.I. sample no.		Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
			Dm. In.	Vt. Ft.	Dm. In.	
	C	Glanskool, gelaag, effens skaliagtig, piriethoudend veral in onderste gedeelte	52	—	—	Coal, bright, banded, slightly shaly, pyritic especially towards bottom.
	B	Glanskool, gelaag, met 'n erg sideriethoudende laag (6 dm.) 7 dm. van onder af, 'n soortgelyke lagie (2½ dm.) 24 dm. van onder af en twee soortgelyke lagies (1 dm.) naby bo-ent, piriethoudend	34	—	—	Coal, bright, banded, with a 6-in. very sideritic band 7 in. from bottom, a similar 2½-in. band 24 in. from bottom and two similar 1-in. bands near top; pyritic.
	A	N.G..... Glanskool, gelaag, plek-plek glansend, effens piriët- en kalsiethoudend in boonste en onderste gedeeltes, 1 dm. skalie 5 dm. van bo af	53½ 32½	— 433	2	N.S. Coal, bright, banded, lustrous in parts, slightly pyritic and calcitic in top and bottom portions, 1 in. shale 5 in. from top.
S 551	C	N.G..... Glanskool, gelaag, effens skaliagtig	35 10	436 —	1	N.S. Coal, bright, banded, slightly shaly.
	B	N.G..... Glanskool, gelaag, met baie dun skaliebandjies en 'n skalielagie (2 dm.) 4 dm. van bo af	20 36	— —	—	N.S. Coal, bright, banded with many thin shale bands and a 2-in. shale band 4 in. from top.
	A	N.G..... Glanskool, gelaag, met baie dun skaliebandjies, en 1½ dm. skalie 13 dm. van bo af en 2 dm. skalie 26 dm. van bo af	28 44	— 447	7	N.S. Coal, bright, banded with many thin shale bands, and 1½ in. shale 13 in. from top and 2 in. shale 26 in. from top.
S 552	C	N.G..... Matkool, plek-plek skaliagtig, met baie min glanskool-aartjies; glanskool na onder; 14 dm. sideriethoudende steenkool 12 dm. van onder af; 3 dm. skalie 39 dm. van bo af en 1½ dm. skalie 49 dm. van bo af; effens piriethoudend	429 97	684 692	5 6	N.S. Coal, dull, shaly in places, with very few bright coal-stringers; bright coal towards bottom; 14 in. sideritic coal 12 in. from bottom; 3 in. shale 39 in. from top and 1½ in. shale 49 in. from top; slightly pyritic.
	B	N.G..... Steenkool, gemeng, hoofsaaklik matkool, met 2 dm. skalie 9 dm. van bo af, 'n sideriet- en piriethoudende laag (7 dm.) 30 dm. van bo af en ½ dm. skalie 13 dm. van onder af	229 57	— —	—	N.S. Coal, mixed, mainly dull coal, with 2 in. shale 9 in. from top, a 7-in. sideritic and pyritic band 30 in. from top and ½ in. shale 13 in. from bottom.
	A	N.G..... Matkool, met 'n bietjie glanskool by bo-ent, onderent en in middel, en 'n paar dun skaliebandjies; 3 dm. skalie 30 dm. van bo af en 2 dm. piriët 25 dm. van bo af	51 53	— 717	0	N.S. Coal, dull, with a little bright coal at top, bottom and in middle, and a few thin shale bands; 3 in. shale 30 in. from top and 2 in. pyrite 25 in. from top.

B.H. 117 (contd.)

Bg. 117 (very.)

No. van B.N.I.-monster F.R.I. sample no.	Dikte (Dm.) Thickness (In.)		Ru-steenkool Raw Coal						Waste-toets Washing Test		Dry-stof Float						Sink- stop Sink		
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. C.V. lb./lb.	H ₂ O %	As %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	Groot- te (Dm.) Size (In.)	S.G.	Op- brengs Yield %	V.W. C.W. lb./lb.	H ₂ O %	As %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	As %	
S 551 C	—	10	—	2.7	18.5	34.5	44.3	2½	— ³ / ₁₆	1.40	44.8	—	—	—	—	—	—	—	—
	20	36	—	2.4	37.6	25.6	34.4	1½	— ³ / ₁₆	1.40	23.7	—	—	—	—	—	—	—	—
	28	44	—	—	24.9	—	—	—	— ³ / ₁₆	1.40	40.9	—	3.3	5.6	35.7	55.4	3½	38.3	
S 552 C	2,838	97	9.9	2.3	27.0	20.0	50.7	P	—1	1.58	45.1	—	—	—	—	—	—	—	—
	132	57	9.6	2.2	28.6	21.2	48.0	F	—1	1.58	38.0	—	—	—	—	—	—	—	—
	51	53	—	—	29.0	—	—	—	—1	1.58	57.4	12.0	2.6	14.6	24.9	57.9	1½	48.4	
A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

BOORGAT 118 : SCHATPLAATS 1065 : BOREHOLE 118

Kern 2½ dm.

Core 2½ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sand.....	44	0	44	0	Sand.
Oppervlakkalksteen.....	3	0	47	0	Surface-limestone.
Sandsteen en moddersteen.....	211	0	258	0	Sandstone and mudstone.
Sandsteen (stampboor).....	5	3	263	3	Sandstone (jump-drill).
Sandsteen, erg fyn- tot middel- korrelrig, plek-plek grofkorrel- rig tot grinterig, met enkele half- geronde tot hoekige kwarts- spoelklippies waarvan sommige 'n diameter van ½ dm. bereik, veldspaties, taamlik massief, mikahoudend waar gelaag, wit, met twee dun, vaal en pers moddersteenlagies (Moltenolae)	23	10	287	1	Sandstone, very fine-grained to medium-grained; coarse-grained to gritty in parts, with occa- sional sub-rounded to angular quartz pebbles up to ½ in. in diameter, feldspathic, fairly mas- sive, micaceous where lamina- ted, white, with two thin grey and purple mudstone bands (Molteno Beds).
Moddersteen, ligpers, pers, vale- rig, bruinpers, donkervaal, sjokoladebruin, alle kleure ge- meng; baie wryfvlakke kom voor	115	3	402	4	Mudstone, light purple, purple, greyish, brownish, dark grey, chocolate-brown, all colours mixed; many slickensides occur.
Skalie, swart, met enkele steen- koolstrepies en baie wryfvlakke		8	403	0	Shale, black, with occasional coal-streaks and many slicken- sides.
Glanskool, gelaag, skalieagtig in onderste 5 dm. kalsiethoudend	1	1	—	—	Coal, bright, banded, shaly in bottom 5 in., calcitic.
Skalie, swart.....	1	8	—	—	Shale, black.
Skalie tussengelaag met steenkool		10	—	—	Shale, interbedded with coal.
Glanskool, gelaag.....		7	—	—	Coal, bright, banded.
Skalie met dun steenkoolbandjies.	1	1	—	—	Shale with thin coal-bands.
Glanskool, gelaag, skalieagtig na bo en onder	1	6	—	—	Coal, bright, banded, shaly towards top and bottom.
Glanskool, gelaag, plek-plek vitriet- agtig en effens priethoudend	2	0	—	—	Coal, bright, banded, vitrainous in parts and slightly pyritic.
Skalie, swart, met steenkool by onderent	5	2	—	—	Shale, black, with coal at bottom.
Skalie.....	1	2	—	—	Shale.
Glanskool, gelaag, kalsiethoudend, met enkele dun skalielagies in middel	1	4	—	—	Coal, bright, banded, calcitic, with occasional thin shale bands in middle.
Skalie met 'n bietjie steenkool in middel		10	—	—	Shale with a little coal in middle.
Glanskool, gelaag, kalsiethoudend		10	421	2	Coal, bright banded, calcitic.
Skalie, swart.....	4	0	—	—	Shale, black.
Glanskool, gelaag met enkele dun skaliebandjies		11½	—	—	Coal, bright, banded, with occa- sional thin shale bands.
Skalie.....		3	—	—	Shale.
Glanskool, gelaag.....		9	—	—	Coal, bright, banded.
Skalie.....	1	4	—	—	Shale.
Glanskool, gelaag, plek-plek vitriet- agtig, met 2 dm., skalie 5 dm. van onder af	2	6½	431		Coal, bright, banded; vitrainous in parts, with 2 in. shale 5 in. from bottom.
Skalie, swart, en koolstofhoudende skalie, met 'n dun steenkool- bandjie	8	2	439	6	Shale, black and carbonaceous shale, with a thin coal-band.
Skalie en steenkool om die beurt	2	3	—	—	Shale alternating with coal.
Skalie met tussengelaagde steen- kool	1	6	—	—	Shale interbedded with coal.
Skalie.....		10	—	—	Shale.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	<i>Vt.</i> <i>Ft.</i>	<i>Dm.</i> <i>In.</i>	<i>Vt.</i> <i>Ft.</i>	<i>Dm.</i> <i>In.</i>	
Glanskool , gelaag, met 'n bietjie skalie en talryke wryfvlakke (kern is erg gebreek en sowat 5 vt. kern verloor tussen 439 vt. 6 dm. en 450 vt. 6 dm.)	1	5	450	6	Coal , bright, banded, with a little shale and numerous slickensides (core is badly broken and about 5 ft. core lost between 439 ft. 6 in. and 450 ft. 6 in.).
Skalie, swart, en koolstofhoudende skalie	6	10	460	4	Shale, black, and carbonaceous shale.
Skalie en glanskool om die beurt; 'n wryfvlak by onderent	7	8	470	0	Shale alternating with bright coal; slickenside at bottom.
Glanskool , gelaag, met dun skaliebandjies, effens piriethoudend	3	7	—		Coal , bright, banded, with thin shale bands, slightly pyritic.
Skalie tussengelaag met steenkool, skalielae	3	6	478	11	Shale interbedded with coal, shale bands.
Skalie, swart en donkervaal, plek-plek koolstofhoudend, met vier skalieagtige steenkoollagies van 2 tot 4 dm.	43	3	522	2	Shale, black and dark grey, carbonaceous in places, with four 2-in. to 4-in. shaly coal-bands.
Moddersteen, ligvaal, sanderig na onder	10	6	532	8	Mudstone, light grey, sandy towards bottom.
Moddersteen, plek-plek met enkele kwartskorrels, liggroen, vaalgroen en ligvaal; onderste 8 vt. gevlek met persbruin en liggroen; baie wryfvlakke kom voor	73	4	606	0	Mudstone with occasional quartz grains in parts, light green, grey-green and light grey; bottom 8 ft. mottled with purplish brown and light green; many slickensides occur.

BOORGAT 118 : SCHATPLAATS 1065 : BOREHOLE 118

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
S 336	N.G.....	<i>Dm.</i> 8	<i>Vt.</i> <i>Ft.</i>	<i>Dm.</i> <i>In.</i>	N.S.
	Glanskool, gelaag, skaliagtig in onderste 5 dm., kalsiet- houdend	13	403	0	Coal, bright, banded, shaly in bottom 5 in., calcitic.
	N.G.....	50	—	—	N.S.
	D Glanskool, gelaag, skaliagtig na bo en onder	18	—	—	Coal, bright, banded, shaly towards top and bottom.
	C Glanskool, gelaag, plek-plek vitrietagtig en effens piriet- houdend	24	—	—	Coal, bright, banded, vit- rainous in parts and slightly pyritic.
	N.G.....	76	—	—	N.S.
	B Glanskool, gelaag, kalsiethou- dend met enkele dun skalie- lagies in middel	16	—	—	Coal, bright, banded, calcitic, with occasional thin shale bands in middle.
S 337	N.G.....	10	—	—	N.S.
	A Glanskool, gelaag, kalsiethou- dend	10	421	2	Coal, bright, banded, calcitic.
	N.G.....	48	425	2	N.S.
	Glanskool, gelaag met enkele dun skaliebandjies	11½	—	—	Coal, bright, banded, with occasional thin shale bands.
	N.G.....	3	—	—	N.S.
	B Glanskool, gelaag.....	9	—	—	Coal, bright, banded.
	N.G.....	16	—	—	N.S.
S 338	A Glanskool, gelaag, plek-plek vitrietagtig met 2 dm. skalie 5 dm. van onder af	30½	431	0	Coal, bright, banded, vitrai- nous in parts, with 2 in. shale 5 in. from bottom.
	N.G.....	92	470	0	N.S.
	A Glanskool, gelaag, met dun skaliebandjies, effens piriet- houdend	43	—	—	Coal, bright, banded, with thin shale bands; slightly pyritic.
	N.G..... (22 dm. kern verloor)	42	478	11	N.S. (22 in. core lost).

BOORGAT 119 : MINNASVLAKTE 716 : BOREHOLE 119

Kern $3\frac{1}{2}$ dm.Core $3\frac{1}{2}$ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sand, kalksteen en moddersteen (stampboor)	132	6	132	6	Sand, limestone and mudstone (jump-drill).
Moddersteen, liggeel tot vaal en vaalgeel, verweer	33	6	—	—	Mudstone, light yellow to grey and grey-yellow, weathered.
Moddersteen, ligvaal en vaalblou, plek-plek swart in onderste 14 vt.	76	0	242	0	Mudstone, light grey and grey-blue, with black parts in bottom 14 ft.
Skalie, swart, en koolstofhoudende skalie	1	8	—	—	Shale, black and carbonaceous shale.
Glanskool, skalieagtig, piriethoudend	2	—	243	10	Coal, bright, shaly, pyritic.
Glanskool, gelaag, effens skalieagtig by bo- en onderent, piriethoudend	2	0	245	10	Coal, bright, banded, slightly shaly at top and bottom, pyritic and calcitic.
Skalie, kleierig, vaalswart en swart	5	7	—	—	Shale, clayey, greyish-black and black.
Glanskool, gelaag, skalieagtig in middel	1	1	—	—	Coal, bright, banded, shaly in middle.
Skalie en steenkool; in onderste gedeelte is skalie tussengelaag met steenkool	1	4	—	—	Shale and coal; in bottom portion shale is interbedded with coal.
Skalie en steenkool.....	2	9	—	—	Shale and coal.
Glanskool, gelaag.....	1	0	—	—	Coal, bright, banded.
Skalie, swart, met vier glanskool-lagies van 3 tot 6 dm.	3	11	—	—	Shale, black, with four 3-in. to 6-in. bright coal-bands.
Glanskool, gelaag, met baie skalie-lagies; piriethoudend by bo-ent	1	5	—	—	Coal, bright, banded, with many shale bands; pyritic at top.
Skalie en gelaagde glanskool.....	1	0 $\frac{1}{2}$	—	—	Shale, and banded bright coal.
Glanskool, gelaag, met 4 dm. skalie 14 dm. van bo af en 'n sideriet-lagie van 'n halfduim 2 dm. van onder af	2	8	266	9	Coal, bright, banded, with 4 in. shale 14 in. from top and a $\frac{1}{2}$ -in. sideritic band 2 in. from bottom.
Skalie, donkervaal tot swart.....	3	9	—	—	Shale, dark grey to black.
Skalie en steenkool, laasgenoemde tussengelaag met dunner skalie-lae	6	6	—	—	Shale and coal, the latter interbedded with thinner shale bands.
Skalie, met dun steenkoolbandjies	1	0	—	—	Shale with thin coal-bands.
Skalie en steenkool, breë steenkool-lae tussengelaag met dunner skalie-lae	6	1	284	1	Shale and coal; broad coal bands interbedded with thinner shale bands.
Glanskool, gelaag, erg kalsiet- en piriethoudend	2	4	—	—	Coal, bright, banded, very calcitic and pyritic.
Skalie.....	1	2	—	—	Shale.
Glanskool, gelaag, erg skalieagtig en kalsiethoudend	1	2	—	—	Coal, bright, banded, very shaly and calcitic.
Skalie tussengelaag met steenkool	3	5	—	—	Shale interbedded with coal.
Glanskool, gelaag, effens skalieagtig en piriethoudend na onder	2	2	—	—	Coal, bright, banded, slightly shaly and pyritic towards bottom.
Steenkool en skalie, gemeng.....	1	1 $\frac{1}{2}$	—	—	Coal and shale, mixed.
Glanskool, gelaag, skalieagtig by bo- en onderent, met 2 dm. skalie 12 dm. van bo af, piriethoudend	3	2	—	—	Coal, bright, banded, shaly towards top and bottom with 2 in. shale 12 in. from top, pyritic and calcitic.
Skalie.....	—	3 $\frac{1}{2}$	—	—	Shale.
Glanskool, gelaag, met 1 dm. skalie 3 dm. van onder af, kalsiet- en piriethoudend	3	11	302	10	Coal, bright, banded, with 1 in. shale 3 in. from bottom, calcitic and pyritic.
Skalie, swart.....	1	2	—	—	Shale, black.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Glanskool, gelaag, skalieagtig by onderent	1	5	—	—	Coal, bright, banded, shaly at bottom.
Skalie.....	4	8	—	—	Shale.
Glanskool, gelaag, skalieagtig, sideriethoudend met 4 dm. koolstofhoudende skalie 13 dm. van bo af	2	7	—	—	Coal, bright, banded, shaly, sideritic, with 4 in. carbonaceous shale 13 in. from top.
Skalie, koolstofhoudend, met steenkool-aartjies		4	313	0	Shale, carbonaceous, with coal-stringers.
Skalie, swart tot vaalswart.....	4	6	—	—	Shale, black to grey black.
Glanskool, gelaag, boonste en onderste 4 dm. is erg skalieagtig	1	11	319	5	Coal, bright, banded, top and bottom 4 in. is very shaly.
Skalie, koolstofhoudend, met gemengde steenkool en skalie in onderste helfte	2	1	—	—	Shale, carbonaceous, with mixed coal and shale in bottom half.
Skalie, swart met baie steenkool-aartjies	7	5	—	—	Shale, black, with many coal-stringers.
Skalie, en steenkool en skalie om die beurt	2	3	—	—	Shale and with alternating coal and shale bands.
Glanskool, gelaag, erg skalieagtig in onderste helfte en met skalielae in boonste helfte	2	3	—	—	Coal, bright, banded, very shaly in bottom half and with shale bands in top half.
Skalie, swart.....	3	1	336	7	Shale, black.
Glanskool, gelaag, plek-plek skalieagtig	1	1	—	—	Coal, bright, banded, shaly in parts.
Skalie.....	1	6	339	2	Shale.
Skalie tussengelaag met steenkool	1	3	—	—	Shale interbedded with coal.
Steenkool, fyn, tussengelaag met skalie, effens sideriethoudend	2	2	—	—	Coal, interlaminated with shale, lightly sideritic.
Skalie, koolstofhoudend, met 'n wryfvlak naby bo-ent	1	1	—	—	Shale, carbonaceous, with a slickenside near top.
Skalie tussengelaag met steenkool	1	11½	—	—	Shale interbedded with coal.
Glanskool, gelaag, erg skalieagtig	2	1½	—	—	Coal, bright, banded, very shaly.
Skalie en steenkool; laasgenoemde fyn tussengelaag met dun skalielagies	5	0	—	—	Shale and coal, the latter interlaminated with thin shale bands.
Skalielae, breed, glanskoollae, en breë tussengelaagde skalie- en steenkoollae (6½ dm. kern verloor tussen 339 vt. 2 dm. en 361 vt. 5 dm.)	8	1½	361	5	Shale bands, broad, bright coal-bands and broad interbanded shale and coal-bands (6½ in. core lost between 339 ft. 2 in. and 361 ft. 5 in.).
Skalie, swart, met ses steenkool-lagies van 2 tot 4 dm.; onderste 1 dm. is sanderig	5	5	—	—	Shale, black, with six 2-in. to 4-in. coal-bands; bottom 1 in. is sandy.
Skalielae, fyn, tussengelaag met glanskoollae	4	0	373	3	Shale bands interlaminated with bright coal-bands.
Glanskool, gelaag; erg sideriethoudend in middelste 10 dm. en erg skalieagtig in onderste 13 dm.	2	5	—	—	Coal, bright, banded; very sideritic in middle 10 in. and very shaly in bottom 13 in.
Skalie.....	1	3	—	—	Shale.
Glanskool, gelaag, en steenkoolagtige skalie	1	5	—	—	Coal, bright, banded, and coaly shale.
Skalie.....	2	2	—	—	Shale.
Glanskool, gelaag, en skalie.....	1	4	—	—	Coal, bright, and shale.
Skalie.....		9	—	—	Shale.
Glanskool, gelaag, met 4 dm. skalie by onderent	1	3	—	—	Coal, bright, banded, with 4 in. shale at bottom.
Skalie.....	1	9	—	—	Shale.
Skalielae en glanskoollae om die beurt; sideriethoudend	5	8	—	—	Shale bands alternating with bright coal-bands; sideritic.

Bg. 119 (verv.)

B.H. 119 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Skalie, swart, met baie verspreide kwartskorrels waarvan sommige in diameter van 7 mm. bereik	9	8	—	—	Shale, black, with many scattered quartz grains, some up to 7 mm. in diameter.
Skalie, bruin tot swart, sanderig.	3	0	—	—	Shale, black to brown, sandy.
Sandsteen, skalieagtig.....		9	—	—	Sandstone, shaly.
Skalie, swart, plek-plek koolstofhoudend, met enkele dun glanskoollagies	6	10	—	—	Shale, black, carbonaceous in parts, with a few thin, bright coal-bands.
Skalie en steenkool, gemeng, sideriethoudend	2	5	—	—	Shale and coal, mixed, sideritic.
Skalie, swart.....	1	4	412	10	Shale, black.
Glanskool, gelaag, onderste 2 dm. erg sideriethoudend	1	7	—	—	Coal, bright, banded, bottom 2 in. very sideritic.
Skalie, swart, effens koolstofhoudend na onder, met verspreide kwartskorrels oor 18 dm. en 6 vt. van bo af; wryfvlakke naby bo-ent	19	4	—	—	Shale, black; slightly carbonaceous towards bottom, with scattered quartz grains over 18 in. thickness 6 ft. from top; slickensides near top.
Skalielae, steenkoolagtig, en gelaagde glanskoollae om die beurt	6	0	439	9	Shale bands, coaly, alternating with banded, bright coal-bands.
Skalie, koolstofhoudend, met enkele dun sideriethoudende glanskoolbandjies	8	6	—	—	Shale, carbonaceous, with a few thin sideritic bright coal-bands.
Glanskool, skalieagtig by onderent	1	4	—	—	Coal, bright, shaly at bottom.
Skalie, swart, en koolstofhoudende skalie, met 'n bietjie steenkoolagtige skalie in boonste helfte en 6 dm. vaalswart, grofkorrelrige sandsteen 30 dm. van onder af; 'n bietjie glanskool en skalieagtige steenkool na onder	19	1	—	—	Shale, black and carbonaceous shale, with a little coaly shale in top half and 6 in. grey-black, coarse-grained sandstone 30 in. from bottom; a little bright coal and shaly coal towards bottom.
Skalie en steenkool, gemeng.....	3	4	—	—	Shale and coal, mixed.
Skalie, swart, met baie verspreide kwartskorrels waarvan sommige 'n diameter van 10 mm. bereik	9	9	—	—	Shale, black, with many scattered quartz grains, some up to 10mm. in diameter.
Sandsteen, swart, met 'n swart, kleierige matriks en enkele verspreide kwartspoelkippies, waarvan sommige 'n diameter van 15 mm. bereik; oorgang na oorheenliggende skalie geleidelik	14	0	—	—	Sandstone, black, with a black, clayey matrix and occasional scattered quartz pebbles up to 15 mm. in diameter; transition to overlying shale gradual.
Skalie, vaal.....		11	—	—	Shale, grey.
Sandsteen, fyn- tot grofkorrelrig, vuilwit	2	0	—	—	Sandstone, fine- to coarse-grained, dirty white.
Skalie en fynkorrelrige sandsteen, met matkool naby bo-ent	2	6	—	—	Shale and fine-grained sandstone, with dull coal near top.
Sandsteen, swart, skalieagtig na onder	2	2	—	—	Sandstone, black, shaly towards bottom.
Skalie en steenkool.....	2	5	—	—	Shale and coal.
Skalie, swart, plek-plek donker-vaal	10	6	—	—	Shale, black, dark grey in parts.
Skalie, koolstofhoudend, en skalieagtige matkool	7	1	—	—	Shale, carbonaceous, and shaly dull coal
Skalie, koolstofhoudend, met 'n bietjie steenkoolagtige skalie en matkool	19	6	—	—	Shale, carbonaceous, with a little coaly shale and dull coal.
Skalie, swart, sanderig.....	7	1	550	4	Shale, black, sandy.
Sandsteen, wit, massief, veldspaties, fyn- tot grofkorrelrig, plek-plek grinterig en plek-plek met moddersteeninsluitels	40	7	—	—	Sandstone, white, massive, felspathic, fine- to coarse-grained, gritty in parts, with mudstone inclusions in parts.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Grintsteen, met groot verweerde veldspaatkristalle waarvan sommige 'n diameter van 20 mm. bereik; matriks gedeeltelik vaal en kleiagtig	5	5	—	—	Grit, with large, weathered feldspars up to 20 mm. in diameter; matrix partly grey and clayey.
Sandsteen, fyn- tot grofkorrelrig, grinterig na onder, effens fyn-gelaag, vaal tot vaalbruin	10	5	607	8	Sandstone, fine- to coarse-grained, gritty towards bottom; slightly laminated, grey to grey-brown.
Steenkool , gemeng; hoofsaaklik matkool; sideriethoudend	1	2	—	—	Coal , mixed; mainly dull coal; sideritic.
Glanskool , gelaag, sideriethoudend	1	8	610	6	Coal , bright, banded, sideritic.
Sandsteen, golfvormig, fyn-gelaag, vaal tot swart	14	0	—	—	Sandstone, wavy-bedded, laminated grey to black.
Matkool , swaar, en steenkoolagtige skalie	3	2	—	—	Coal , dull, heavy, and coaly shale.
Matkool ; plek-plek swaar, met glanskoolaartjies en 'n groot pirietskool 19 dm. van onder af; kalsiethoudend	4	8	632	4	Coal , dull; heavy in parts, with bright coal-stringers and a big pyrite nodule 19 in. from bottom; calcitic.
Skalie en steenkoolagtige skalie.	1	1	—	—	Shale and coaly shale.
Steenkool , gemeng, piriethoudend	1	3	—	—	Coal , mixed, pyritic.
Skalie, koolstofhoudend, en steenkoolagtige skalie	5	4	—	—	Shale, carbonaceous, and coaly shale.
Sandsteen, fyn-gelaag, swart tot vaalswart; skalieagtig in onderste 12 dm.	6	6	—	—	Sandstone, laminated black to grey-black; shaly in bottom 12 in.
Sandsteen, wit tot vuilwit, middel- tot grofkorrelrig, massief	21	2	677	9	Sandstone, white to dirty white, medium- to coarse-grained, massive.

BOORGAT 119 : MINNASVLAKTE 716 : BOREHOLE 119

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
		Dm. In.	Vt. Ft.	Dm. In.	
612 C	N.G..... Glanskool, gelaag, effens skaliegagtig by bo- en onder- ent, priet- en kalsiethou- dend	2 24	243	10	N.S. Coal, bright, banded, slightly shaly at top and bottom, pyritic and calcitic.
B	N.G..... Glanskool, gelaag, met baie skalielagies, priethoudend by bo-ent	188 17	—	—	N.S. Coal, bright, banded, with many shaly bands; pyritic at top.
A	N.G..... Glanskool, gelaag, met 4 dm. skalieg 14 dm. van bo af, en 'n siderietlagie van 'n half- duim 2 dm. van onder af	12½ 32	266	9	N.S. Coal, bright, banded, with 4 in. shale 14 in. from top, and a ½-in. sideritic band 2 in. from bottom.
613 J	N.G..... Glanskool, gelaag, erg kalsiet- en priethoudend	73 28	284	1	N.S. Coal, bright, banded, very calcitic and pyritic.
H	N.G..... Glanskool, gelaag, skaliegagtig en kalsiethoudend	14 14	—	—	N.S. Coal, bright, banded, very shaly and calcitic.
G	N.G..... Glanskool, gelaag, effens skaliegagtig en priethoudend na onder	41 26	—	—	N.S. Coal, bright, banded, slightly shaly and pyritic towards bottom.
F	Steenkool en skalieg, gemeng..	13½	—	—	Coal, and shale, mixed.
E	Glanskool, gelaag, skaliegagtig by bo- en onderent, met 2 dm. skalieg 12 dm. van bo af, priet- en kalsiethoudend	38 3½	—	—	Coal, bright, banded, shaly at top and bottom, with 2 in. shale 12 in. from top, pyritic and calcitic.
D	N.G..... Glanskool, gelaag, met 1 dm. skalieg 3 dm. van onder af, kalsiet- en priethoudend	47	—	—	N.S. Coal, bright, banded, with 1 in. shale 3 in. from bottom, calcitic and pyritic.
C	N.G..... Glanskool, gelaag, skaliegagtig by onderent	14 17	—	—	N.S. Coal, bright, banded, shaly at bottom.
B	Glanskool, gelaag, skaliegagtig, sideriethoudend, met 4 dm. koolstofhoudende skalieg 13 dm. van bo af	31	—	—	Coal, bright, banded, shaly, sideritic, with 4 in. carbona- ceous shale 13 in. from top
A	N.G..... Glanskool, gelaag; boonste en onderste 4 dm. erg skalieg- agtig	58 23	319	5	N.S. Coal, bright, banded; top and bottom 4 in. very shaly.
614 D	N.G..... Glanskool, gelaag, plek-plek skaliegagtig	37 13	336	7	N.S. Coal, bright, banded, shaly in parts.
	N.G.....	18	339	2	N.S.
	N.G.....	15	—	—	N.S.
C	Steenkool, fyn, tussengelaag met skalieg	26	—	—	Coal, interlaminated with shale.
	N.G.....	36½	—	—	N.S.

Bg. 119 (verv.)

B.H. 119 (contd.)

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
		<i>Dm. In.</i>	<i>Vt. Ft.</i>	<i>Dm. In.</i>	
B	Glanskool, gelaag, erg skalie- agtig	25½	—	—	Coal, bright, banded, very shaly.
	N.G. (6½ dm. kern verloor tussen 339 vt. 2 dm. en 361 vt. 5 dm.)	158½	361	5	N.S. (6½ in. core lost between 339 ft. 2 in. and 361 ft. 5 in.)
A	N.G.....	113	—	—	N.S.
	Glanskool, gelaag; erg sideriet- houdend in middelste 10 dm. en erg skalieagtig in onderste 13 dm.	29	373	3	Coal, bright, banded; very sideritic in middle 10 in. and very shaly in bottom 13 in.
S 615	N.G.....	16	412	10	N.S.
	C Glanskool, gelaag, onderste 2 dm. erg sideriethoudend	19	414	5	Coal, bright, banded, bottom 2 in. very sideritic.
B	N.G. tussen 414 vt. 5. dm. en 607 vt. 8 dm.	—	607	8	N.S. between 414 ft. 5 in. and 607 ft. 8 in.
	Steenkool, gemeng, hoofsaak- lik matkool, sideriethou- dend	14	—	—	Coal, mixed; mainly dull coal, sideritic.
A	Glanskool, gelaag, sideriet- houdend	20	—	—	Coal, bright, banded, sideritic.
	N.G.....	206	—	—	N.S.
A	Matkool, plek-plek swaar met glanskoolaartjies en 'n groot pirietknol 19 dm. van onder af, kalsiethoudend	56	632	4	Coal, dull, heavy in parts, with bright coal-stringers and a big pyritic nodule 19 in. from bottom; calcitic.

BOORGAT 119 : MINNASVLAKTE 716 : BOREHOLE 119

ANALISE VAN LUGGEDROOGDE STEENKOOI

ANALYSIS OF AIR-DRIED COAL

No. van B.N.I.-monster F.R.I. sample no.	DIKTE (DM.) THICKNESS (IN.)		RU-STEENKOOI RAW COAL				WASTOETS WASHING TEST		DRYESTOF FLOAT						SINK- STOF SINK	
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	Op- brengs Yield %	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	As Ash %
S 612	—	24	—	—	20.5	—	—	—	52.8	13.1	3.2	9.4	37.7	49.7	3½	33.0
	189	17	—	—	19.6	—	—	—	48.6	13.1	3.6	7.2	35.4	53.8	3	31.4
	12½	28	—	—	19.5	—	—	—	45.5	12.9	3.3	9.0	36.2	51.5	3½	28.3
	208	28	—	—	23.1	—	—	—	46.0	12.8	3.6	8.6	35.6	52.2	3½	35.5
S 613	—	14	—	—	33.6	—	—	—	—	—	—	—	—	—	—	—
	41	14	—	—	22.5	—	—	—	40.6	13.1	3.9	7.2	34.4	54.5	3½	32.9
	—	26	—	—	39.5	—	—	—	18.9	13.0	3.6	7.5	34.7	54.2	3	46.9
	—	38	—	—	25.8	—	—	—	43.0	13.1	3.4	7.8	35.8	53.0	3	39.3
S 614	—	47	—	—	21.5	—	—	—	50.3	12.8	3.4	9.5	35.7	51.4	3	33.7
	14	17	10.5	2.6	25.8	31.5	40.1	2	—	—	—	—	—	—	—	—
	56	27	10.0	2.7	26.7	33.9	36.7	1½	23.5	—	—	—	—	—	—	—
	59	23	9.8	2.6	28.4	32.0	37.0	1.4g	26.9	—	—	—	—	—	—	—
A	206	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

BOORGAT 120 : ELANDBOSCH 714 : BOREHOLE 120

Kern $3\frac{1}{2}$ dm.Core $3\frac{1}{2}$ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
d en moddersteen.....	136	0	136	0	Sand and mudstone.
dersteen, vaalgeel, vaal, met	18	6	—	—	Mudstone, greyish-yellow, grey,
nderste 18 dm. ligrooi					with bottom 18 in. pink.
dersteen, ligvaal, met kalsiet-	82	6	243	4	Mudstone, light grey, with calcite
re tussen 63 vt. en 70 vt. van					veins between 63 ft. and 70 ft.
o af					from top.
lie, swart.....	1	6	—	—	Shale, black.
nskool, gelaag, piriethoudend	1	6	—	—	Coal, bright, banded, pyritic
eral in boonste 3 dm., erg					especially in top 3 in., very
calieagtig in onderste 6 dm.					shaly in bottom 6 in.
lie, donkervaal, swart by bot-	5	6	252	0	Shale, dark grey, black at top.
tt					
nskool, gelaag, piri- en kal-	1	8	—	—	Coal, bright, banded, pyritic and
ethoudend in boonste 2 dm.;					calcitic in top 2 in.; $\frac{1}{2}$ in. shale
dm. skalie in middel					in middle.
lie.....		6	—	—	Shale.
nskool, gelaag.....		5	—	—	Coal, bright, banded.
lie, swart en vaalswart.....	3	$2\frac{1}{2}$	—	—	Shale, black and grey-black.
nskool, gelaag, met enkele dun	1	7	—	—	Coal, bright, banded, with occa-
caliebandjies					sional thin shale bands.
lie met steenkool by onderent		$9\frac{1}{2}$	260	9	Shale with coal at bottom.
lie, swart, met enkele steen-	3	2	263	11	Shale, black, with occasional coal-
oolbandjies					bands.
nskool, gelaag, effens piri- et-	2	1	—	—	Coal, bright, banded, slightly
oudend, skalieagtig in boonste					pyritic, shaly and calcitic in top
dm.					3 in.
lie.....		$2\frac{1}{2}$	—	—	Shale.
nskool, gelaag.....		$8\frac{1}{2}$	—	—	Coal, bright, banded.
lie.....		2	—	—	Shale.
nskool, gelaag.....	1	2	—	—	Coal, bright, banded.
lie.....		4	—	—	Shale.
nskool, gelaag; skalieagtig in		10	—	—	Coal, bright, banded; shaly in
nderste 1 dm.					bottom 1 in.
lie en gelaagde glanskool....		2	269	9	Shale and banded, bright coal.
lie, swart en vaalswart, met 'n	3	0	272	9	Shale, black and greyish-black,
ryfvlak by onderent					with a slickenside at bottom.
lie en glanskool tussengelaag	8	8	—	—	Shale and bright coal interbedded
et enkele dik skalielae					with occasional thick shale
					bands.
nskool, gelaag, effens piri- et-	1	11	—	—	Coal, bright, banded, slightly
oudend					pyritic.
nskool, tussengelaag, met skalie		$8\frac{1}{2}$	—	—	Coal, bright, banded, and shale
					interbanded.
lielae, glanskoolae en tussen-	7	$2\frac{1}{2}$	—	—	Shale bands, bright coal-bands,
elaagde skalie- en glanskoolae					and interbanded shale and
					bright coal-bands.
lie- en gelaagde glanskoolae	6	6	—	—	Shale alternating with banded
in die beurt; twee dik skalielae;					bright coal; two thick shale
dryke wryfvlakke kom voor					bands; numerous slickensides
					occur.
nskool, gelaag, skalieagtig, met	1	3	—	—	Coal, bright, banded, shaly, with
wryfvlakke					slickensides.
nskool, gelaag, met enkele dun	1	1	—	—	Coal, bright, banded, with occa-
calielagies (kern erg gebreek as					sional thin shale bands (core
evolgt van talryke wryfvlakke;					badly broken as a result of
eraamde verlies sowat 20 dm.)					numerous slickensides; estima-
					mated loss about 20 in.).

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Glanskool , gelaag, met baie dun skalielagies (kern erg gebreek as gevolg van talryke wryfvlakke; beraamde verlies sowat 23 dm.)	1	11	—	—	Coal , bright, banded, with many thin shale bands (core badly broken as a result of numerous slickensides; estimated loss about 23 in.).
Skalie en glanskool.....		3	—	—	Shale and bright coal.
Glanskool , gelaag, en skalie (beraamde kernverlies sowat 1 dm.)	1	0	—	—	Coal , bright, banded, and shaly (estimated loss of core about 1 in.).
Glanskool , gelaag, plek-plek pikagtig (kern gebreek by bo-ent; beraamde kernverlies sowat 2 dm.)	1	7	—	—	Coal , bright, banded; pitchlike parts (core broken at top; estimated loss of core about 2 in.).
Skalie tussengelaag met glanskool; 'n wryfvlak by bo-ent		7	—	—	Shale and bright coal; interbedded; a slickenside at top.
Skalie, swart, met 'n bietjie glanskool en twee glyvlakke	5	6	314	9	Shale, black, with a little bright coal and two slickensides.
Glanskool , gelaag, skalieagtig in boonste 1 dm.		4½	—	—	Coal , bright, banded, shaly in top 1 in.
Skalie.....		1½	—	—	Shale.
Glanskool , gelaag, skalieagtig na bo en onder, sideriet- en piriet-houdend; wryfvlakke in middel	3	4	—	—	Coal , bright, banded, shaly towards top and bottom, sideritic and pyritic; slickensides in middle.
Skalielae en gelaagde glanskoollae om die beurt; enkele wryfvlakke kom voor	3	5	—	—	Shale bands alternating with banded, bright coal-bands; occasional slickensides occur.
Glanskool , gelaag, met 'n paar skaliebandjies, sideriet- en piriet-houdend	1	1	323	1	Coal , bright, banded, with a few shale bands, sideritic and pyritic.
Skalie en glanskool, sideriethoudend		3	—	—	Shale and bright coal, sideritic.
Skalie, swart, met twee wryfvlakke	8	8	—	—	Shale, black, with two slickensides.
Skalie tussengelaag met gelaagde glanskool, effens sideriethoudend	1	6½	—	—	Shale and banded bright coal interbedded, slightly sideritic.
Skalie.....	1	0	—	—	Shale.
Glanskool , gelaag, met 'n paar dun skalielandjies, plek-plek pikagtig, effens sideriet- en piriet-houdend; 'n sideriethoudende lagie (¾ dm.) 10 dm. van bo af	2	3	336	9½	Coal , bright, banded, with a few thin shale bands; pitchlike parts, slightly sideritic and pyritic; a ¾-in. sideritic band 10 in. from top.
Skalielae en sideriethoudende gelaagde glanskoollae om die beurt	3	7½	—	—	Shale bands alternating with sideritic, banded, bright coal-bands.
Skalie, swart, met wryfvlakke by bo-ent	4	5	—	—	Shale, black, slickensides at top.
Skalie, gelaagde glanskool, en tussengelaagde breër skalielae	10	2	—	—	Shale, banded bright coal and interbedded wider shale bands.
Skalielae, breed, en breë lae van tussengelaagde skalie en steenkool, sideriethoudend in boonste gedeelte	17	2	372	10	Shale, broad bands, and broad bands of interbedded shale and coal, sideritic at top portion.
Glanskool , gelaag, met baie dun skaliebandjies veral by bo- en onderent, effens sideriethoudend	1	9	—	—	Coal , bright, banded, with many thin shale bands especially at top and bottom, slightly sideritic.
Skalie, steenkoolagtig.....		8	—	—	Shale, coaly.

Bg. 120 (verv.)

B.H. 120 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
nskool, gelaag, met 1½ dm. kalie 23 dm. van bo af en 'n paar dunner skaliebandjies, erg kalsiet- en piriethoudend by bo en onderent	3	3	378	6	Coal, bright, banded, with 1½ in. shale 23 in. from top and a few thinner shale bands, very calcitic and pyritic at top and bottom.
lie, swart.....	1	9	—	—	Shale, black.
nskool, gelaag.....		3	—	—	Coal, bright, banded.
lie.....		3	380	9	Shale.
nskool, gelaag, erg skalieagtig, met drie skaliebandjies van 1 dm. n onderste helfte; effens piriethoudend	2	0½	—	—	Coal, bright, banded, very shaly, with three 1-in. shale bands in bottom half, slightly pyritic.
lie, koolstofhoudend.....		6	—	—	Shale, carbonaceous.
nskool, gelaag, erg glansend, effens kalsiethoudend na bo en sideriethoudend na onder	3	0	—	—	Coal, bright, banded, very lustrous, slightly calcitic towards top and sideritic towards bottom.
nskool, gelaag, taamlik sideriethoudend (1½ dm. kern verloor tussen 380 vt. 9 dm. en 387 vt. 0 dm.)	1	5	387	10	Coal, bright, banded, fairly sideritic (1½ in. core lost between 380 ft. 9 in. and 387 ft. 10 in.).
lie, swart, met 'n wryfvlak....	1	7	—	—	Shale, black, with a slickenside.
lie en gelaagde glanskool....	1	7	—	—	Shale and banded, bright coal.
lie, swart, met dertien steenkoolbandjies van 1 tot 4 dm.; verspreide kwartskorrels waarvan sommige 'n diameter van 1 mm. bereik in boonste 48 dm.	38	10	429	10	Shale, black, with thirteen 1-in. to 4-in. coal-bands; scattered quartz grains, up to 3 mm. in diameter in top 48 in.
nskool, erg sideriethoudend....		3	—	—	Coal, very sideritic.
nskool, gelaag, effens sideriethoudend, piriethoudend in middel	3	2	433	3	Coal, bright, banded, slightly sideritic, pyritic in middle.
lie en gelaagde glanskool.....	1	7	—	—	Shale and banded bright coal.
lie, swart, en koolstofhoudende kalie	12	2	—	—	Shale, black, and carbonaceous shale.
lie, koolstofhoudend, met 'n bietjie steenkoolagtige skalie en 'n bietjie skalieagtig glanskool n onderste helfte	20	8	467	8	Shale, carbonaceous, with a little coaly shale and a little shaly bright coal in bottom half.
lie, swart tot swartbruin, met 'n paar dun sandsteenlagies in boonste 6 dm., wryfvlakke in middel, effens sanderig na onder, fossiieldraend	6	6	—	—	Shale, black to blackish-brown, with two thin sandstone bands in top 6 in.; slickensides in middle, slightly sandy towards bottom, fossiliferous.
lie, swartbruin.....	2	7	—	—	Shale, blackish-brown.
lie, koolstofhoudend, sideriethoudend in onderste helfte	1	10	—	—	Shale, carbonaceous, sideritic in bottom half.
lie, swartbruin, plek-plek sanderig, fossiieldraend	4	1	482	8	Shale, blackish-brown; sandy in parts, fossiliferous.
steen, vuilvaal tot swart, koolstofhoudend, skalieagtig in middel	4	7	—	—	Sandstone, dirty grey to black, carbonaceous, shaly in middle.
lie, bruin tot vaal swart, met 'n paar sideriethoudend glanskool	17	5	—	—	Shale, brown to grey-black, with a few sideritic bright coal-bands, carbonaceous in middle.
lie, koolstofhoudend in middel					
lie, koolstofhoudend, en steenkoolagtige skalie, met 'n bietjie paar matkool en enkele glanskoolbandjies	24	10	—	—	Shale, carbonaceous, and coaly shale, with some heavy dull coal and a few bright coal-bands.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Skalie, ligbruin, donkerkleurig in middel	6	8	536	5	Shale, light brown, dark colour in middle.
Sandsteen, wit, massief, veldspaties, fyn- tot grofkorrelrig, boonste 8 vt. erg fynkorrelrig, vaalbruin en ligbruin	51	10	588	3	Sandstone, white, massive, pathic, fine- to coarse-grained, top 8 ft. very fine-grained, grey brown and light brown.
Matkool met enkele glanskool-aartjies en dun skaliebandjies; 3 dm. skalie by onderent; effens piriethoudend naby onderent	4	6	—	—	Coal, dull, with a few bright coal stringers and thin shale bands; 3 in. shale at bottom; slightly pyritic near bottom.
Steenkool, gemeng; hoofsaaklik matkool; meer glansend na bo en onder; 'n (1½ dm.) pirietskool 9 dm. van bo af en 10 dm. sideriethoudende steenkool 9 dm. van onder af	3	6	596	3	Coal, mixed; mainly dull coal brighter towards top and bottom; a 1½ in. pyrite nodule 9 in. from top and 10 in. from bottom.
Sandsteen, erg fynkorrelrig, wit tot vuilwit, vaalswart na onder, effens fyngelaag; onderste 2 vt. grinterig	20	9	—	—	Sandstone, very fine-grained, white to dirty white, grey-brown towards bottom, slightly laminated; bottom 2 ft. gritty, sandy.
Steenkool en sandsteen.....	—	9	—	—	Coal and sandstone.
Sandsteen.....	—	6	618	3	Sandstone.
Matkool met 'n pirietskool in middel, plek-plek swaar en kalsiethoudend	3	9	—	—	Coal, dull, with a pyritic band in middle, heavy and calcitic parts.
Skalie, koolstofhoudend, en steenkoolagtige skalie	1	6	—	—	Shale, carbonaceous, and coal shale.
Steenkool, gemeng; hoofsaaklik glanskool; erg pirietskool- en kalsiethoudend	3	5	—	—	Coal, mixed; mainly bright coal very pyritic and calcitic.
Skalie, koolstofhoudend, met 'n paar glanskool-aartjies	—	10	—	—	Shale, carbonaceous, with a few bright coal-stringers.
Steenkool, gemeng; hoofsaaklik glanskool; kalsiethoudend by bo-ent en in middel; piriethoudend in middel	4	0	631	9	Coal, mixed; mainly bright coal calcitic at top and in middle; pyritic in middle.
Skalie, koolstofhoudend, en gemengde steenkool, erg kalsiethoudend met baie wryfvlakke	1	0	—	—	Shale, carbonaceous, and coal; very calcitic and pyritic with many slickensides.
Skalie, swart, sanderig, met verspreide groterige kwartskorrels na onder; baie wryfvlakke	2	4	—	—	Shale, black, sandy, with scattered fairly big quartz grains towards bottom; many slickensides.
Skalie, swart, met heelwat dun sandsteenbandjies; baie wryfvlakke by bo-ent	9	6	—	—	Shale, black, with many thin sandstone bands; many slickensides at top.
Sandsteen, wit, vuilwit, veldspaties, fyn- tot middelkorrelrig, taamlik massief, met enkele golfvormige swart lagies	15	4	659	11	Sandstone, white, dirty white, felspathic, fine- to medium-grained, fairly massive, with a few black, wavy layers.
Matkool, swaar.....	1	9	661	8	Coal, dull, heavy.
Sandsteen, grofkorrelrig, vuilvaal, massief	3	2	664	10	Sandstone, coarse-grained, dirty grey, massive.

BOORGAT 120 : ELANDBOSCH 714 : BOREHOLE 120

No. van L.N.I. monster P.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
		Dm. In.		Vt. Ft.	Dm. In.	
328 H A	N.G.....	66 20		252 —	0	N.S. Coal, bright, banded, pyritic and calcitic in top 2 in. and ½ in. shale in middle.
	N.G.....	49½ 19		— —		N.S. Coal, bright, banded, with a few thin shale bands.
	N.G. (7 dm. kern verloor tussen 252 vt. en 260 vt. 9 dm.)	9½		260	9	N.S. (7 in. core lost between 252 ft. and 260 ft. 9 in.).
329 A	N.G.....	38		263	11	N.S.
	Glanskool, gelaag, effens piriethoudend, skalieagtig en kalsiethoudend in boon- ste 3 dm.	25		266	0	Coal, bright, banded, slightly pyritic, shaly and calcitic in top 3 in.
	N.G.....	2½		—		N.S.
	Glanskool, gelaag.....	8½		—		Coal, bright, banded.
	N.G.....	2		—		N.S.
	Glanskool, gelaag.....	14		—		Coal, bright, banded.
	N.G.....	4		—		N.S.
	Glanskool, gelaag, skalieagtig en kalsiethoudend in onder- ste 1 dm. (2 dm. kern ver- loor tussen 266 vt. en 269 vt. 7 dm.)	10		269	7	Coal, bright, banded, shaly and calcitic in bottom 1 in. (2 in. core lost between 266 ft. and 269 ft. 7 in.).
330 F E D C B A	N.G.....	140		272	9	N.S.
	Glanskool, gelaag, effens piriethoudend	23		—		Coal, bright, banded, slightly pyritic.
	Glanskool tussengelaag met skalie	8½		—		Coal, bright, and interbedded shale.
	N.G.....	164½		—		N.S.
	Glanskool, gelaag, skalieagtig, met wryfvlakke	15		—		Coal, bright, banded, shaly, with slickensides.
	Glanskool, gelaag, met enkele dun skalielagies (kern erg gebreek as gevolg van tal- ryke wryfvlakke; beraamde verlies sowat 20 dm.)	13		—		Coal, bright, banded, with a few thin shale bands (core badly broken as a result of numerous slickensides; esti- mated loss about 20 in.).
	Glanskool, gelaag, met baie dun skalielagies (kern erg gebreek as gevolg van tal- ryke wryfvlakke; beraamde verlies sowat 23 dm.)	23		—		Coal, bright, banded, with many thin shale bands (core badly broken as a result of numerous slickensides; esti- mated loss about 23 in.).
	N.G.....	3		—		N.S.
	Glanskool, gelaag, en skalie (beraamde verlies sowat 1 dm.)	12		—		Coal, bright, banded, and shale (estimated loss about 1 in.).
	Glanskool, gelaag, plek-plek pikagtig (kern gebreek by bo-ent; beraamde verlies sowat 2 dm.)	19		—		Coal, bright, banded, pitchlike in parts (core broken at top; estimated loss about 2 in.).
	N.G.....	7		309	3	N.S.

No. van B.N.I.- monster F.R.I. sample no.		Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
			Dm. In.	Vt. Ft.	Dm. In.	
S 331		N.G.....	66	314	9	N.S.
		Glanskool, gelaag, skalieagtig in boonste 1 dm.	4½	—	—	Coal, bright, banded, shaly top 1 in.
	B	N.G.....	1½	—	—	N.S.
		Glanskool, gelaag, skalieagtig na bo en onder, sideriet- en piriethoudend met wryf- vlakke in middel	40	—	—	Coal, bright, banded, sha- lows towards the top and botto- m; sideritic and pyritic with slickensides in middle.
	A	N.G.....	41	—	—	N.S.
		Glanskool, gelaag, met 'n paar skalielagies, sideriet- en piriethoudend	13	323	1	Coal, bright, banded, with few shale bands, sideritic and pyritic.
S 332		N.G.....	12	334	6½	N.S.
	A	Glanskool, gelaag, met 'n paar dun skalielagies, plek-plek pikagtig, effens sideriet- en piriethoudend; 'n sideriet- houdende lagie (¾ dm.) 10 dm. van bo af	27	336	9½	Coal, bright, banded, with few thin shale bands, pyritic like in parts, slightly pyritic and sideritic; a ¾-in. sideritic band 10 in. from top.
S 544		N.G.....	206	372	10	N.S.
	B	Glanskool, gelaag, met baie dun skalielagies veral by bo- en onderent; effens sideriethoudend	21	—	—	Coal, bright, banded, with many thin shale bands espe- cially at top and bottom slightly sideritic.
	A	N.G.....	8	—	—	N.S.
		Glanskool, gelaag, met 'n (1½ dm.) skalielagie 23 dm. van bo af en 'n paar dunner skalielagies, erg kalsiet- en piriethoudend by bo- en onderent	39	378	6	Coal, bright, banded, with 1½-in. shale band 23 in. from top and a few thinner shale bands, very calcitic and pyritic at top and bottom
S 545		N.G.....	3	380	9	N.S.
	D	Glanskool, gelaag, erg skalie- agtig, met drie skalielagies van 1 dm. in onderste helfte, effens piriethoudend	24½	—	—	Coal, bright, banded, ver- shaly, with three 1-in. shale bands in bottom half, slightly pyritic.
		N.G.....	6	—	—	N.S.
	C	Glanskool, gelaag, erg glans- send, effens kalsiethoudend na bo en sideriethoudend na onder	36	—	—	Coal, bright, banded, slight- ly calcitic towards top and sideritic towards bottom.
	B	Glanskool, gelaag, taamlik sideriethoudend (1½ dm. kern verloor tussen 380 vt. 9 dm. en 387 vt. 10 dm.)	17	387	10	Coal, bright, banded, fair- ly sideritic (1½ in. core lost between 380 ft. 9 in. and 387 ft. 10 in.).
	A	N.G.....	507	—	—	N.S.
		Glanskool, gelaag, effens sideriethoudend, piriethou- dend in middel	38	433	3	Coal, bright, banded, slight- ly sideritic, pyritic in middle.
S 547		N.G.....	622	588	3	N.S.
	B	Matkool, met enkele glans- koolaartjies en dun skalie- lagies; 3 dm. skalie by onderent; effens piriethou- dend naby onderent	54	—	—	Coal, dull, with a few bright coal-stringers and thin shale bands; 3 in. shale at bottom slightly pyritic near bottom

Bg. 120 (verv.)

B.H. 120 (contd.)

No. van N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth	Nature of strata
		<i>Dm. In.</i>	<i>Vt. Ft.</i> <i>Dm. In.</i>	
A	Steenkool , gemeng; hoofsaaklik matkool; meer glansend na bo en onder; 'n pirietknol (1½ dm.) 9 dm. van bo af en 10 dm. sideriethoudende steenkool 9 dm. van onder af	42	596 3	Coal , mixed; mainly dull coal; brighter towards top and bottom; a 1½-in. pyrite nodule 9 in. from top and 10 in. sideritic coal 9 in. from bottom.
547	N.G.....	6	618 3	N.S.
D	Matkool met 'n pirietlagie in middel; plek-plek swaar en kalsiethoudend	45	—	Coal , dull, with a pyritic band in middle, heavy and calcitic in parts.
	N.G.....	18	—	N.S.
C	Steenkool , gemeng; hoofsaaklik glanskool; erg piriet- en kalsiethoudend	41	—	Coal , mixed; mainly bright coal, very pyritic and calcitic.
B	Steenkool , gemeng; hoofsaaklik glanskool; kalsiethoudend by bo-ent en in middel	48	631 9	Coal , mixed; mainly bright coal; calcitic at top and in middle.
	N.G.....	154	—	N.S.
	N.G.....	184	659 11	N.S.
A	Matkool , swaar.....	21	661 8	Coal , dull, heavy.

BOORGAT 121 : APPELVLAKE 1368 : BOREHOLE 121

Kern $3\frac{1}{2}$ dm.Core $3\frac{1}{2}$ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sand.....	10	0	10	0	Sand.
Sandsteen (Holkranssandsteen)...	94	0	104	0	Sandstone (Cave Sandstone).
Sandsteen, erg fynkorrelrig, plek- plek kleierig, ligbruin, ligrooi en vaalwit, plek-plek gespikkel met kalsiet; die onderste 20 vt. bevat heelwat verspreide kwarts- korrels, sommige waarvan 'n diameter van 1 mm. bereik	294	5	398	5	Sandstone, very fine-grained, clayey in parts, light-brown, pink and grey-white in parts, mottled by calcite in parts; bottom 20 ft. contains many scattered quartz grains up to 1 mm. in diameter.
Sandsteen, bruin, kleierig met baie kalkhoudende knolle (Rooilae)	4	5	402	10	Sandstone, brown, clayey, with many calcareous nodules (Ro- Bed).
Sandsteen, middel- tot grofkorrel- rig met baie grinterige gedeeltes, moddersteeninsluitels kom plek-plek voor; donkerbruin, vaal, ligblou en persagtig	32	2	—	—	Sandstone, medium- to coarse- grained, with many gritty por- tions; mudstone inclusion occur in places; dark brown, grey, light blue and purplish.
Sliksteen, bruin.....	2	4	—	—	Siltstone, brown.
Sandsteen, fyn- tot middelkorrel- rig, plek-plek grinterig, vaal en ligblou	22	6	—	—	Sandstone, fine- to medium- grained, gritty in parts, grey and light blue.
Grintsteen, vaalblou.....	1	3	—	—	Grit, grey-blue.
Sandsteen, fyn- tot middelkorrel- rig, plek-plek grinterig, vaal en ligblou	15	5	—	—	Sandstone, fine- to medium- grained, gritty in parts, grey to light blue.
Moddersteen, sanderig.....	3	10	—	—	Mudstone, sandy.
Sandsteen, fynkorrelrig, vaal en ligpers, effens mikahoudend (Moltenolae)	5	2	486	1	Sandstone, fine-grained, grey and light purple, slightly micaceous (Molteno Beds).
Moddersteen, sjokoladebruin, plek-plek vaalblou	97	5	—	—	Mudstone, chocolate-brown, grey blue in parts.
Moddersteen, vaal, vaalblou, lig- blou	206	6	790	0	Mudstone, grey, greyish-blue, light blue.
Skalie, swart, kleierig.....	1	9	—	—	Shale, black, clayey.
Skalie, koolstofhoudend, met glanskoolaartjies	—	8	792	5	Shale, carbonaceous, with bright coal-stringers, very pyritic.
Glanskool, gelaag, effens priet- en kalsiethoudend, met 1 dm. skalie naby onderent	2	8	795	1	Coal, bright, banded, slightly pyritic and calcitic, with 1 in. shale near bottom.
Skalie, vaal en swart, kleierig, met 8 dm. gelaagde glanskool naby onderent	6	4	—	—	Shale, grey and black, clayey, with 8 in. banded bright coal- near bottom.
Glanskool, gelaag, effens priet- houdend	1	0	—	—	Coal, bright, banded, slightly pyritic.
Skalie, vaal en swart, met vier glanskoolae van 7 tot 10 dm.	9	3	—	—	Shale, grey and black, with four 7-in. to 10-in. bright coal-bands.
Glanskool en skalie.....	—	11	—	—	Coal, bright, and shale.
Skalie, blou tot swart, met vier glanskoolae van 3 tot 7 dm.	6	9	—	—	Shale, blue to black, with four 3-in. to 7-in. bright coal-bands.
Skalie, tussengelaag met gelaagde glanskool, met enkele breë glans- koolae en skalielae; wryfvlak naby onderent	7	1	826	5	Shale, interbedded with banded bright coal; occasional broad bright coal-bands and shale bands; slickenside near bottom.
Steenkool, gemeng, en skalie, met $2\frac{1}{2}$ dm. skalie 3 dm. van onder af	1	$3\frac{1}{2}$	—	—	Coal, mixed, and shale, with $2\frac{1}{2}$ shale 3 in. from bottom.
Glanskool, gelaag, met baie dun skaliebandjies, effens priet- en kalsiethoudend	1	8	—	—	Coal, bright, banded, with many thin shale bands, slightly pyritic and calcitic.

Bg. 121 (verv.)

B.H. 121 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
kalie, swart, en koolstofhoudende	3	4	—	—	Shale, black, and carbonaceous
skalie, met glanskoolaartjies					shale, with bright coal-stringers.
kalie en steenkool, gemeng.		9	—	—	Shale and coal, mixed.
glanskool, gelaag, plek-plek vitriet-	2	1	—	—	Coal, bright, banded, vitrainous
agtig, met enkele skalielensies					in parts, with an occasional
en enkele siderietkorrels naby					shale lenticle and an occasional
bo-ent					siderite pellet near top.
kalie.....		5	—	—	Shale.
kalie tussengelaag met glanskool		10	—	—	Shale interbedded with bright coal.
glanskool, gelaag, kalsiethoudend		11	—	—	Coal, bright, banded, calcitic.
kalie.....		7	—	—	Shale.
kalie tussengelaag met steenkool	1	5	—	—	Shale interbedded with coal.
glanskool, gelaag, skalieagtig en	1	0½	—	—	Coal, bright, banded, shaly and
piriethoudend					pyritic.
kalie en steenkool, gemeng.		5	—	—	Shale and coal, mixed.
glanskool, gelaag, plek-plek vit-	2	5	—	—	Coal, bright, banded, vitrainous
rietagtig, effens skalieagtig, ef-					in parts, slightly shaly in top
fens skalieagtig in boonste 8 dm.,					8 in., slightly pyritic.
effens piriethoudend					
kalie, met 1½ dm. glanskool in		5½	—	—	Shale, with 1½ in. bright coal in
middel					middle.
glanskool, gelaag met 1½ dm.	1	6	—	—	Coal, bright, banded, with 1½ in.
skalie 3 dm. van bo af, ½ dm.					shale 3 in. from top, ½ in. shale
skalie 7 dm. van bo af, effens					7 in. from top and slightly
skalieagtig in onderste 2½ dm.					shaly in bottom 2½ in.
kalie.....		3½	—	—	Shale.
glanskool, gelaag, effens kalsiet-	2	4	848	2	Coal, bright, banded, slightly
houdend, met 5 dm. skalie 13½					calcitic, with 5 in. shale 13½ in.
dm. van bo af					from top.
kalie, swart, met steenkoolband-	2	4	850	6	Shale, black, with coal-bands.
jies					
glanskool, gelaag, met 4 dm.	2	4	—	—	Coal, bright, banded, with 4 in.
skalie, en steenkoolagtige skalie					shale and coal shale 4 in.
4 dm. van bo af, en 5 dm.					from top, and 5 in. mixed coal
gemengde steenkool en skalie					and shale 2 in. from bottom;
2 dm. van onder af; effens					slightly calcitic and pyritic.
kalsiet- en piriethoudend					
kalie.....	1	0	—	—	Shale.
glanskool, gelaag, met 4 dm. skalie	3	4	—	—	Coal, bright, banded, with 4 in.
11 dm. van bo af, 'n piriethou-					shale 11 in. from top, a 5-in.
dende laag (5 dm.) 20 dm. van					pyritic band 20 in. from top,
bo af, 1½ dm. skalie 12 dm. van					1½ in. shale 12 in. from bottom
onder af en ½ dm. skalie 4½ dm.					and ½ in. shale 4½ in. from
van onder af (2 dm. oortollige					bottom (2 in. of core in excess).
kern)					
kalie met 9 dm. glanskool en	8	2	—	—	Shale with 9 in. bright coal and
skalie in middel; wryfvlakke					shale in middle; slickensides
naby bo-ent					near top.
glanskool, gelaag, erg piriethou-	4	10	870	0	Coal, bright, banded, very pyritic
dend in boonste helfte en in					in top half and in middle of
middel van onderste helfte,					bottom half, shaly and sideritic
skalieagtig en sideriethoudend					in bottom 7 in., slightly shaly
in onderste 7 dm., deurgaans					on the whole.
effens skalieagtig					
kalie, swart.....	1	1	—	—	Shale, black.
kalie, koolstofhoudend, met baie	1	11	—	—	Shale, carbonaceous, with many
glanskoolaartjies					bright coal-stringers.
kalie, swart, met 'n paar dun	15	1	—	—	Shale, black, with a few thin coal-
steenkoolagies in boonste 5 vt.					bands in top 5 ft.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	<i>Vt.</i> <i>Ft.</i>	<i>Dm.</i> <i>In.</i>	<i>Vt.</i> <i>Ft.</i>	<i>Dm.</i> <i>In.</i>	
Skalielae en glanskoollae om die beurt, tussengelaag met skalie en steenkool	3	10	891	11	Shale bands with alternating coal bands, interbedded with shale and coal.
Glanskool, gelaag, plek-plek skalieagtig, met 2½ dm. skalie 5 dm. van bo af en 7 dm. gemengde skalie en steenkool 4 dm. van onder af	2	5	—	—	Coal, bright, banded, shaly parts, with 2½ in. shale 5 in. from top and 7 in. mixed shale and coal 4 in. from bottom.
Skalie en glanskool.....	1	0	—	—	Shale and bright coal.
Skalie.....		11	—	—	Shale.
Glanskool, gelaag, plek-plek skalieagtig, effens piriethoudend in middel en kalsiethoudend na bo	3	4	—	—	Coal, bright, banded, shaly parts, slightly pyritic in middle and calcitic towards top.
Skalielae, breed, en breë glanskoollae om die beurt met tussengelaagde steenkool en skalie	10	7	910	2	Shale bands, broad, and bright coal-bands alternating with interbedded coal and shale.
Skalie met dertig steenkoollagies van 2 tot 5 dm., ses skalieagtige glanskoollagies van 7 tot 10 dm.; sommige lae sideriethoudend	44	11	955	1	Shale with thirty 2-in. to 5-in. coal-bands and six 7-in. to 10-in. shaly bright coal-bands; some bands sideritic.
Glanskool, gelaag, skalieagtig, sideriethoudend in onderste 4 dm.	1	8	956	9	Coal, bright, banded, shaly sideritic in bottom 4 in.
Skalie.....		4	—	—	Shale.
Glanskool, gelaag, erg sideriethoudend	1	2	—	—	Coal, bright, banded, very sideritic.
Skalie met sewentien glanskool- en skalieagtige glanskoollae van 1 tot 8 dm.; sommige is erg sideriethoudend	30	7	—	—	Shale with seventeen 1-in. to 8-in. bright coal and shaly bright coal-bands; some are very sideritic.
Skalielae, breed, en gelaagde glanskoollae om die beurt	2	8	—	—	Shale bands, broad, with alternating bright coal-bands.
Glanskool, gelaag.....	1	3	992	9	Coal, bright, banded.
Skalie.....	1	1	—	—	Shale.
Skalielae, breed, en breë gelaagde glanskoollae om die beurt	5	2	—	—	Shale bands, broad, with alternating broad bands of bright coal.
Skalie, koolstofhoudend, met wryfvlakke in middel	4	8	—	—	Shale, carbonaceous, with slickensides in middle.
Skalie, steenkoolagtig, en skalieagtige steenkool, met enkele skalie- en glanskoollae	5	4	—	—	Shale, coaly, and shaly coal, with occasional shale and bright coal bands.
Skalielae, glanskoollae en skalieagtige matkoollae om die beurt	8	0	—	—	Shale bands, with alternating bright coal-bands and shaly dull coal-bands.
Skalie, swart, plek-plek koolstofhoudend, met 'n paar steenkoolagtige skalielagies in onderste helfte; baie wryfvlakke in boonste gedeelte	18	7	1,035	7	Shale, black, carbonaceous parts, with a few coaly shale bands in bottom half; many slickensides in upper portion.
Skalie, steenkoolagtig, skalieagtige steenkool en skalie	6	3	—	—	Shale, coaly, shaly coal and shale.
Skalie.....	3	1	—	—	Shale.
Skalie, steenkoolagtig, skalieagtige steenkool en skalie	5	2	—	—	Shale, coaly, shaly coal and shale.
Skalie, koolstofhoudend.....	13	8	—	—	Shale, carbonaceous.
Matkool, skalieagtig en skalie....	2	3	1,066	0	Coal, dull, shaly and shale.
Matkool, plek-plek swaar; effens kalsiethoudend	2	9	—	—	Coal, dull; heavy in parts, slightly calcitic.

Bg. 121 (verv.)

B.H. 121 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Matkool, korrelrig en piriethoudend in boonste helfte, met 'n paar glanskoollagies in middel	1	11	—	—	Coal, dull, granular and pyritic in top half, with a few bright coal-bands in middle.
Matkool, skalieagtig, en steenkoolagtige skalie, met 1 dm. glanskool by bo-ent		8	—	—	Coal, dull, shaly, and coaly shale, with 1 in. bright coal at top.
Steenkool, gemeng, piriethoudend		8	—	—	Coal, mixed, pyritic.
Matkool met 'n bietjie glanskool en 2 dm. skalie 10 dm. van onder af, piriethoudend naby middel en by onderent, erg kalsiethoudend in boonste gedeelte	3	3	—	—	Coal, dull, with a little bright coal and 2 in. shale 10 in. from bottom, pyritic near middle and at bottom, very calcitic in top portion.
Skalie.....		10	—	—	Shale.
Matkool, swaar, skalieagtig.....		11	—	—	Coal, dull, heavy, shaly.
Skalie, sanderig.....		10	—	—	Shale, sandy.
Matkool met 'n kleierige kalsiet-houdende band (4 dm.) 15 dm. van bo af	2	7	—	—	Coal, dull, with a 4-in. clayey, calcitic band 15 in. from top.
Steenkool, swaar, skalieagtig, piriethoudend by onderent	2	5	—	—	Coal, heavy, shaly, pyritic at bottom.
Steenkool, gemeng; hoofsaaklik matkool; glansend na onder, kalsiet- en erg piriethoudend	2	8	1,085	6	Coal, mixed; mainly dull coal, bright toward bottom, calcitic and very pyritic.
Sandsteen, erg fynkorrelrig, swart tot swartbruin; 'n paar golwende lae	11	9	—	—	Sandstone, very fine-grained, black to blackish-brown; a few wavy bands.
Sandsteen, middelkorrelrig, vuilwit, met golwende swart, sandrige skalielagies in onderste tweederdes	4	2	1,101	5	Sandstone, medium-grained, dirty white, with wavy, black, sandy shale bands in bottom two-thirds.
Skalie, koolstofhoudend, met 'n bietjie skalieagtige steenkool	5	11	—	—	Shale, carbonaceous, with a little shaly coal.
Skalie, steenkoolagtig.....	1	6	1,108	10	Shale, coaly.
Matkool, plek-plek swaar en skalieagtig, met enkele glanskool-aartjies by bo-ent; 'n pirietslaag (4 dm.) 24 dm. van bo af en piriethoudend in boonste 3 dm.	3	0	—	—	Coal, dull, heavy and shaly in parts, with a few bright coal-streaks at top; a 4-in. pyrite band 24 in. from top and pyritic in top 3 in.
Steenkool, gemeng, piriethoudend by bo-ent en 'n skalieagtige lagie (1½ dm.) 4 dm. van onder af	2	2½	—	—	Coal, mixed, pyritic at top and a 1½-in. shaly band 4 in. from bottom.
Steenkool, gemeng; hoofsaaklik matkool; meer glansend in onderste helfte, 'n piriethoudende lagie van 'n halfduim 18 dm. van onder af, 2 dm. skalie 14 dm. van bo af; skalieagtig in boonste 8 dm.	4	3½	1,118	4	Coal, mixed; mainly dull coal; brighter in bottom half, a ½-in. pyritic band 18 in. from bottom, 2 in. shale 14 in. from top; shaly in top 8 in.
Sandsteenbande, erg fynkorrelrig, donkervaal tot swart, en wit tot vuilwit, fyn- tot middelkorrelrige sandsteenbande om die beurt	14	8	—	—	Sandstone bands, very fine-grained, dark grey to black alternating with white to dirty white, fine- to medium-grained sandstone.
Sandsteen, fynkorrelrig, swart tot swartbruin met golwende lae	5	0	—	—	Sandstone, fine-grained, black to blackish-brown, with wavy bands.
Skalie, swart, sanderig.....	4	9	—	—	Shale, black, sandy.
Sandsteen, vuilvaal, grofkorrelrig	3	3	1,146	3	Sandstone, dirty grey, coarse-grained.

Bg. 121 (verv.)

B.H. 121 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Matkool met enkele glanskool-aartjies; boonste 10 dm. bevat sandsteeninsluitels	5	2	1,151	5	Coal, dull, with a few bright coal stringers; top 10 in. contain sandstone inclusions.
Sandsteen; boonste helfte koolstofhoudend en onderste helfte swart tot vuilvaal	2	1	1,153	6	Sandstone; top half carbonaceous and bottom half black to dirty grey.

BOORGAT 121 : APPELVLAKE 1368 : BOREHOLE 121

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth	Nature of strata	
S 537 A	N.G..... Glanskool, gelaag, effens piriet- en kalsiethoudend, met 1 dm. skalie naby onderent	Dm. In. 8 32	Vt. Ft. 792 795	Dm. In. 5 1	N.S. Coal, bright, banded, slightly pyritic, and calcitic, with 1 in. shale near bottom.
S 538 F	N.G..... Steenkool, gemeng, en skalie, met 2½ dm. skalie 3 dm. van onder af	85 15½	826	5	N.S. Coal, mixed, and shale, with 2½ in. shale 3 in. from bottom.
E	Glanskool, gelaag, met baie dun skaliebandjies; effens piriet- en kalsiethoudend	20	—	—	Coal, bright, banded, with many thin shale bands slightly pyritic and calcitic
D	N.G..... Glanskool, gelaag, plek-plek vitrietagtig, met enkele skalielensies en enkele side- rietkorrels naby bo-ent	49 25	—	—	N.S. Coal, bright, banded, vitrai- nous in parts, with an occa- sional shale lenticle and an occasional siderite pellet near top.
C	N.G..... Glanskool, gelaag..... N.G.....	50 12½ 5	— — —	— — —	N.S. Coal, bright, banded. N.S.
B	Glanskool, gelaag, plek-plek vitrietagtig, effens skalie- agtig in boonste 8 dm., effens piriethoudend N.G.....	29 5½	— —	—	Coal, bright, banded, vitrai- nous in parts, slightly shaly in top 8 in. slightly pyritic N.S.

Bg. 121 (verv.)

B.H. 121 (contd.)

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
		Dm. In.	Vt. Ft.	Dm. In.	
A	Glanskool, gelaag, met 1½ dm. skalie 3 dm. van bo af, ½ skalie 7 dm. van bo af; skalieagtig in onderste 2½ dm.	18	—	—	Coal, bright, banded, with 1½ in. shale 3 in. from top, ½ in. shale 7 in. from top and shaly in bottom 2½ in.
	N.G..... Glanskool, gelaag, effens kalsiethoudend, met 5 dm. skalie 13½ dm. van bo af uitgesluit	3½ 28	— —	—	N.S. Coal, bright, banded, slightly calcitic, with 5 in. shale 13½ in. from top excluded.
539 C	N.G..... Glanskool, gelaag, met 4 dm. skalie en steenkoolagtige skalie 4 dm. van bo af, en 5 dm. gemengde steenkool en skalie 2 dm. van onder af; effens kalsiethoudend	28 28	850 —	6	N.S. Coal, bright, banded, with 4 in. shale and coaly shale 4 in. from top, and 5 in. mixed coal and shale 2 in. from bottom; slightly calcitic and pyritic.
B	N.G..... Glanskool, gelaag, met 4 dm. skalie 11 dm. van bo af, 'n piriethoudende laag (5 dm.) 20 dm. van bo af, 1½ dm. skalie 12 dm. van onder af en 'n halfduim skalie 4½ dm. van onder af (2 dm. oortollige kern)	12 40	— —	—	N.S. Coal, bright, banded, with 4 in. shale 11 in. from top, a 5-in. pyritic band 20 in. from top, 1½ in. shale 12 in. from bottom and ½ in. shale 4½ in. from bottom (2 in. of core in excess).
A	N.G..... Glanskool, gelaag, erg piriethoudend in boonste helfte en in middel van onderste helfte, skalieagtig en sideriethoudend in onderste 7 dm., deurgaans effens skalieagtig	98 58	865 870	2 0	N.S. Coal, bright, banded, very pyritic in top half and in middle of bottom half, shaly and sideritic in bottom 7 in., slightly shaly on the whole.
540 C	N.G..... Glanskool, gelaag, plek-plek skalieagtig, met 2½ dm. skalie 5 dm. van bo af en 7 dm. gemengde skalie en steenkool 4 dm. van onder af	46 29	891 —	11	N.S. Coal, bright, banded, shaly in parts, with 2½ in. shale 5 in. from top and 7 in. mixed shale and coal 4 in. from bottom.
B	N.G..... Glanskool, gelaag, plek-plek skalieagtig, effens piriethoudend in middel en kalsiethoudend na bo	23 40	— —	—	N.S. Coal, bright, banded, shaly in parts, slightly pyritic in middle and calcitic towards top.
	N.G..... N.G.....	127 539	— 955	—	N.S. N.S.
A	Glanskool, gelaag, skalieagtig, sideriethoudend in onderste 4 dm.	20	956	—	Coal, bright, banded, shaly, sideritic in bottom 4 in.
541 A	N.G..... Glanskool, gelaag.....	32 15	991 992	6 9	N.S. Coal, bright, banded.

No. van B.N.I.- monster F.R.I. sample no.		Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
			Dm. In.	Vt. Ft.	Dm. In.	
S	542	N.G.....	27	1,066	0	N.S.
	F	Matkool, plek - plek swaar, effens kalsiethoudend	33	—		Coal, dull, heavy in part slightly calcitic.
	E	Matkool, korrelrig en piriethoudend in boonste helfte, met 'n paar glanskoolagies in middel	23	—		Coal, dull, granular and pyritic in top half, with a few bright coal-bands in middle.
	D	Matkool, skalieagtig, en steenkoolagtige skalie, met 1 dm. glanskool by bo-ent	8	—		Coal, dull, shaly, and coal shale with 1 in. bright coal at top.
		Steenkool, gemeng, piriethoudend	8	—		Coal, mixed, pyritic.
		Matkool, met 'n bietjie glanskool en 2 dm. skalie 10 dm. van onder af, piriethoudend naby middel en by onderent, erg kalsiethoudend in boonste gedeelte	39	—		Coal, dull, with a little bright coal and 2 in. shale 10 in. from bottom, pyritic near middle and at bottom, very calcitic in top portion.
	C	N.G.....	31	—		N.S.
		Matkool, met 'n kleierige, kalsiethoudende laag (4 dm.) 15 dm. van bo af	31	—		Coal, dull, with a 4-in. clayey calcitic band 15 in. from top
	B	Steenkool, swaar, skalieagtig, piriethoudend by onderent	29	—		Coal, heavy, shaly, pyritic at bottom.
	A	Steenkool, gemeng, hoofsaaklik matkool, glansend na onder, kalsiet- en erg piriethoudend	32	1,085	6	Coal, mixed; mainly dull coal brighter towards bottom, calcitic and very pyritic.
S	543	N.G.....	18	1,108	10	N.S.
	D	Matkool, plek-plek swaar en skalieagtig, met enkele glanskoolaartjies by bo-ent; 'n pirietaag (4 dm.) 24 dm. van bo af en piriethoudend in boonste 3 dm.	36	—		Coal, dull, heavy and shaly in parts, with a few bright coal streaks at top; a 4-in. pyritic band 24 in. from top and pyritic in top 3 in.
	C	Steenkool, gemeng, piriethoudend by bo-ent en 'n 1½ dm. skalieagtige lagie 4 dm. van onder af	26½	—		Coal, mixed, pyritic at top and a 1½-in. shaly band 4 in. from bottom.
	B	Steenkool, gemeng; hoofsaaklik matkool; meer glansend in onderste helfte, 'n piriethoudende lagie van 'n halfduim 18 dm. van onder af, 2 dm. skalie 14 dm. van bo af; skalieagtig in boonste 8 dm.	51½	1,118	4	Coal, mixed; mainly dull coal brighter in bottom half; ½-in. pyritic band 18 in. from bottom, 2 in. shale 14 in. from top, shaly in top 8 in.
	A	N.G.....	332	1,146	3	N.S.
		Matkool met enkele glanskoolaartjies; boonste 10 dm. bevat sandsteeninsluitels	62	1,151	5	Coal, dull, with a few bright coal-stringers, top 10 in. contains sandstone inclusions.

[illegible]

BOORGAT 122 : BRED A 627 : BOREHOLE 122

Kern $3\frac{1}{2}$ dm.Core $3\frac{1}{2}$ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
and.....	8	0	8	0	Sand.
ateriet.....	15	0	—	—	Laterite.
erweerde materiaal.....	28	0	—	—	Weathered material.
kalie en steenkool, verweer (stampboor)	15	3	66	3	Shale and coal, weathered (jump- drill).
kalie, swart, en stukkie glans- kool, alles verbrokkel, baie wryfvlakke kom voor	5	6	97	0	Shale, black, and pieces of bright coal, all crumbled, many slicken- sides occur.
kalie, swart tot vaalswart (kern erg gebreek)	1	10	—	—	Shale, black to greyish-black (core badly broken).
kalie, swart, met verspreide kwartskorrels wat 'n diameter van 2 mm. bereik; baie wryf- vlakke kom voor	8	9	—	—	Shale, black, with scattered quartz grains up to 2 mm. in diameter; numerous slickensides are present.
kalie, swart, met enkele glans- koolagies en baie wryfvlakke (kern erg gebreek)	11	3	—	—	Shale, black, and carbonaceous shale, with an occasional bright coal-band and numerous slickensides (core badly broken).
kalie, swart, en koolstofhoudende skalie, met baie verspreide kwartskorrels waarvan sommige 'n diameter van 3 mm. bereik in onderste helfte en sanderige deeltjies in boonste helfte; 2 dm. verweerde glanskool naby bo-ent	3	10	126	6	Shale, black, and carbonaceous shale, with numerous scattered quartz grains up to 3 mm. in diameter in bottom half and sandy places in top half; 2 in. weathered bright coal near top.
kalie, vaal, met baie kwarts- korrels waarvan sommige 'n diameter van 3 mm. en andere die van 10 mm. bereik; deur- gaans gespikkeld; baie wryf- vlakke	5	2	132	2	Shale, grey, with numerous quartz grains up to 3 mm. in diameter and others up to 10 mm. in diameter; speckled throughout; numerous slickensides.
kalie, swart, met baie kwarts- korrels, waarvan sommige 'n diameter van 3 mm. bereik	4	9	—	—	Shale, black, with numerous quartz grains up to 3 mm. in diameter.
kalie, swart, met enkele glyvlakke na onder	8	6	145	0	Shale, black, with a few slip planes towards bottom.
kalie, ligvaal in boonste helfte en vaalswart na onder, baie ver- spreide kwartskorrels kom voor	6	11	—	—	Shale, light grey in top half and grey-black toward bottom, numerous scattered quartz grains are present.
Moddersteen, vaal, met baie kwartskorrels waarvan sommige 'n diameter van 6 mm. en ander 'n diameter van 40 mm. bereik; 14 dm. vaal, fynkorrelrige tot grinterige sandsteen 3 vt. van onder af	13	10	—	—	Mudstone, grey, with numerous quartz grains up to 6 mm. in in diameter and others up to 40 mm. in diameter; 14 in. grey, fine-grained to gritty sandstone 3 ft. from bottom.
andsteen, grofkorrelrig tot grin- terig, plek-plek fynkorrelrig; matriks moddersteenagtig	19	10	—	—	Sandstone, coarse-grained to gritty, fine-grained in parts; mudstone matrix.
andsteen, fynkorrelrig, sjokolade- bruin	2	0	—	—	Sandstone, fine-grained, chocolate- brown.
andsteen, fynkorrelrig, met enkele grintsteenlagies	4	10	—	—	Sandstone, fine-grained, with occa- sional bands of grit.
andsteen, sjokoladebruin, fynkor- relrig; enkele kwartskorrels met 'n diameter van 'n kwartduim	2	6	—	—	Sandstone, chocolate-brown, fine- grained, with occasional quartz grains $\frac{1}{4}$ in. in diameter.

Bg. 122 (verv.)

B.H. 122 (contd.)

Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth	Nature of strata
Moddersteen, ligvaal tot donker- vaal, erg gespikkel met kwarts- korrels waarvan sommige 'n diameter van 4 mm. bereik; onderste 30 dm. gedeeltelik grinterig; wryfvlakke kom naby onderent voor	<i>Vt.</i> <i>Dm.</i> <i> Ft.</i> <i> In.</i> 9 6	<i>Vt.</i> <i>Dm.</i> <i> Ft.</i> <i> In.</i> 203 10	Mudstone, light-grey to dark grey, intently speckled with quartz grains up to 4 mm. in diameter; bottom 30 in. gritty in part; slickensides occur near bottom.

BOORGAT 123 : GELYKEBULT 70 : BOREHOLE 123

Kern 3½ dm.

Core 3½ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sand.....	13	0	13	0	Sand.
Sandsteen, wit, liggeel in boonste 25 vt. (Holkranssandsteen)	237	7	250	7	Sandstone, white, light yellow in top 25 ft. (Cave Sandstone).
Sandsteen, erg fynkorrelrig, plek-plek slijksteen veral in onderste 80 vt.; ligbruin, geelbruin en wit; baie kalkhoudende knolle verleen 'n gespikkelde voorkoms aan sekere dele (Rooilae)	297	7	548	2	Sandstone, very fine-grained; siltstone in parts especially in bottom 80 ft.; light brown, yellow-brown and white; numerous calcareous nodules impart a mottled appearance to certain parts (Red Beds).
Sandsteen, vaalbruin, fynkorrelrig in boonste helfte, grofkorrelrig in onderste helfte	5	10	—	—	Sandstone, grey - brown, fine-grained in top half, coarse-grained in bottom half.
Sandsteen, ligbruin, fynkorrelrig tot kleiig	8	7	—	—	Sandstone, light - brown, fine-grained to argillaceous.
Sandsteen en grintsteen.....		11	—	—	Sandstone and grit.
Sandsteen, middel- tot grofkorrelrig, met enkele swakgeronde kwarts:poelklippies, sommige waarvan 'n halfduim in diameter bereik; donkerbruin	2	7	—	—	Sandstone, medium- to coarse-grained, with occasional poorly rounded quartz pebbles up to ½ in. in diameter; dark-brown.
Sandsteen, middelkorrelrig, wit, met enkele bruin knolle	3	1	—	—	Sandstone, medium-grained, white, with occasional brown patches.
Sandsteen, middel- tot grofkorrelrig, met enkele grinterige gedeeltes in boonste helfte en in onderste 6 vt., enkele spoelklippies; enkele kleiknolle in boonste helfte; rooibruin met vaalwit gedeeltes	25	0	602	2	Sandstone, medium- to coarse-grained, with occasional gritty parts in top half and in bottom 6 ft.; occasional pebbles; occasional clay nodules in top half; red-brown with greyish-white portions.
Sandsteen, middel- tot grofkorrelrig, plek-plek grinterig, wit en en vaalbruin	25	0	628	5	Sandstone, medium- to coarse-grained, gritty in parts, white and greyish-brown.
Moddersteen, sjokoladebruin in boonste helfte en ligbruin in onderste helfte, effens sanderig na onder	21	8	—	—	Mudstone, chocolate-brown in top half and light brown in bottom half, slightly sandy towards bottom.
Sandsteen, fynkorrelrig, effens mikahoudend, gelaag, en bruin, effens sanderige moddersteen (Moltenolae)	6	8	657	8	Sandstone, fine-grained, banded, and brown, slightly arenaceous mudstone (Molteno Beds).
Moddersteen, sjokoladebruin, donkerbruin en persbruin, almal gemeng, plek-plek ligvaal tot blouvaal veral in boonste helfte	138	0	—	—	Mudstone, chocolate-brown, dark brown and purplish-brown, all mixed; light grey to blue-grey in parts, especially in top half.
Moddersteen, vaal en blouvaal, met donkerkleurige tot swart gedeeltes in onderste 15 vt.	186	7	982	3	Mudstone, grey and blue-grey, with dark coloured to black parts in bottom 15 ft.
Skalie, swart, kleiig.....	4	5	987	8	Shale, black, argillaceous.
Glanskool, gelaag, skalieagtig....		4	988	0	Coal, bright, banded, shaly.
Glanskool, gelaag, plek-plek glansend, effens piriet- en kalsiethoudend	1	10	—	—	Coal, bright, banded, lustrous in parts, slightly pyritic and calcitic.
Skalie, swart, plek-plek ligvaal...	5	7	—	—	Shale, black, light grey in parts.
Skalie en steenkool.....		2	—	—	Shale and coal.
Glanskool, gelaag, effens skalieagtig		11	—	—	Coal, bright, banded, slightly shaly and pyritic.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Skalie.....		5	—	—	Shale.
Glanskool, gelaag.....	1	3	—	—	Coal, bright, banded.
Skalie, swart en ligvaal.....	2	11	—	—	Shale, black and light grey.
Glanskool, gelaag, skalieagtig; 'n wryfvlak by bo-ent	1	1	—	—	Coal, bright, banded, shaly; slickenside at top.
Skalie, swart, met twee steenkool- lagies van 6 dm.	4	7	—	—	Shale, black, with two 6-in. coal bands.
Glanskool, gelaag, erg skalieagtig, kalsiet- en piriethoudend in onderste helfte	1	8	—	—	Coal, bright, banded, very shaly; calcitic and pyritic in bottom half.
Skalie.....		5	—	—	Shale.
Glanskool, gelaag, plek-plek effens skalieagtig; met 1½ dm. skalie 17 dm. van bo af; kalsiethou- dend	2	0	1,010	10	Coal, bright, banded, slightly shaly in parts; 1½ in. shale 17 in. from top, calcitic.
Skalie, swart.....	4	1	—	—	Shale, black.
Skalie en steenkool, fyntussenge- laag met enkele skalielae	5	10	—	—	Shale, and coal, finely interlami- nated with a few shale bands.
Skalie.....	8	6	1,029	3	Shale.
Glanskool, gelaag, erg skalieagtig en kalsiethoudend, piriethou- dend	2	2	—	—	Coal, bright, banded, very shaly and calcitic, pyritic.
Skalie.....	2	6	—	—	Shale.
Glanskool, gelaag, skalieagtig by bo- en onderent	1	0	—	—	Coal, bright, banded, shaly at top and bottom.
Skalie en steenkool, tussengelaag; met 'n paar skaliebande	5	1	—	—	Shale and coal, interbedded; with a few shale bands.
Glanskool, gelaag, skalieagtig, erg kalsiet- en piriethoudend	1	8	—	—	Coal, bright, banded, shaly, very calcitic and pyritic.
Skalie met steenkoolaartjies.....	1	2	—	—	Shale with coal-stringers.
Glanskool, gelaag, skalieagtig naby bo-ent; 2 dm. skalie 11 dm. van onder af	5	2	—	—	Coal, bright, banded, shaly near top; 2 in. shale 11 in. from bottom.
Skalie tussengelaag met steenkool		2	—	—	Shale interbedded with coal.
Skalie met 1 dm. steenkool in middel		7	—	—	Shale with 1 in. coal in middle.
Glanskool, gelaag, kalsiethoudend en effens piriethoudend	1	2	—	—	Coal, bright, banded, calcitic and slightly pyritic.
Skalie, koolstofhoudend, en ge- mengde steenkool, met skalie in onderste helfte	1	7	—	—	Shale, carbonaceous, and mixed coal with shale in bottom half.
Glanskool, gelaag, plek-plek skalie- agtig; 6 dm. gemengde skalie en steenkool 16 dm. van bo af; piriethoudend in boonste 2 dm.; kalsiethoudend	2	8	1,054	2	Coal, bright, banded, shaly in parts; 6 in. mixed shale and coal 16 in. from top; pyritic in top 2 in.; calcitic.
Skalie, swart.....	1	3	—	—	Shale, black.
Glanskool, gelaag.....		5	1,055	10	Coal, bright, banded.
Skalie met steenkoolaartjies.....		4	—	—	Shale with coal-stringers.
Glanskool, gelaag, skalieagtig by bo-ent, sideriethoudend	1	5	—	—	Coal, bright, banded, shaly at top, sideritic.
Skalie en steenkool.....		3	—	—	Shale and coal.
Skalie en sandsteen.....	2	0	—	—	Shale and sandstone.
Glanskool, gelaag, skalieagtig (3 dm. kern verloor tussen 1,055 vt. 10 dm. en 1,061 vt.)		11	1,061	0	Coal, bright, banded, shaly (3 in. core lost between 1,055 ft. 10 in. and 1,061 ft.).
Skalie, swart, met ses lagies tussen- gelaagde steenkool en skalie van 5 tot 12 dm.)	8	8	1,069	8	Shale, black, with six 5-in. to 12-in. bands of interbedded coal and shale.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Glanskool, skalieagtig en kalsiet-houdend, erg sideriethoudend	1	2	—	—	Coal, bright, shaly and calcitic, very sideritic.
Skalie.....	6	5	1,077	3	Shale.
Glanskool, gelaag, erg skalieagtig, boonste helfte kalsiethoudend	1	6	—	—	Coal, bright, banded, very shaly; top half calcitic.
Skalie; onderste 3 dm. bevat baie steenkoolaartjies	1	2	—	—	Shale; bottom 3 in. contains many coal-stringers.
Glanskool, gelaag, skalieagtig, kalsiethoudend, enkele pirietlense	4	4	—	—	Coal, bright, banded, shaly, calcitic, with occasional pyrite lenses.
Skalie, koolstofhoudend, met steenkoolaartjies		4	—	—	Shale, carbonaceous, with coal-stringers.
Glanskool, gelaag, erg skalieagtig in onderste tweederdes	2	3	—	—	Coal, bright, banded, very shaly in bottom two-thirds.
Skalie tussengelaag met steenkool, onderste 4 dm. erg sideriethoudend		10	—	—	Shale and interbedded coal; bottom 4 in. very sideritic.
Glanskool, gelaag, kalsiethoudend		4	1,088	0	Coal, bright, banded, calcitic.
Skalielae, breed, breë lae van gelaagde glanskool, en gemengde steenkool en skalie om die beurt; sommige lae sideriethoudend	32	4	1,120	4	Shale bands, broad, alternating with broad bands of banded bright coal, and mixed coal and shale; some bands sideritic.
Glanskool, gelaag, erg skalieagtig, erg sideriethoudend in onderste 16 dm., kalsiethoudend	2	0	—	—	Coal, bright, banded, very shaly, very sideritic in bottom 16 in., calcitic.
Skalie.....	14	6	—	—	Shale.
Glanskool, gelaag, onderste helfte erg skalieagtig en sideriethoudend, kalsiethoudend	1	11	—	—	Coal, bright, banded; bottom half very shaly and sideritic, calcitic.
Skalie.....	19	9	—	—	Shale.
Glanskool, gelaag, skalieagtig in middelste 3 dm.	2	0	1,160	6	Coal, bright, banded, shaly in middle 3 in.
Skalie, swart, en koolstofhoudende skalie, met baie dun steenkool-lagies en lagies van gemengde steenkool en skalie; baie min steenkoolagtige skalie; enkele wryfvlakke kom voor naby middel	31	10	—	—	Shale, black, and carbonaceous shale, with numerous thin coal-bands and bands of mixed coal and shale; very little coaly shale; occasional slickensides near middle.
Skalie en steenkool, gemeng, kalsiethoudend	2	4	—	—	Shale and coal, mixed, calcitic.
Glanskool, gelaag, met enkele lae van swaar matkool	1	7	—	—	Coal, bright, banded, with occasional bands of heavy dull coal.
Glanskool, gelaag, plek-plek erg skalieagtig	1	9	—	—	Coal, bright, banded, very shaly in parts.
Skalie, swart.....	2	10	1,200	10	Shale, black.
Moddersteen, ligbruin, met baie onduidelike plantafdrukke; plek-plek sanderig; enkele sandsteenlagies naby onderent	2	7	—	—	Mudstone, light brown, with many indistinct plant impressions; sandy in parts; occasional sandstone bands near bottom.
Sandsteen, wit, middelkorrelrig..		11	—	—	Sandstone, white, medium-grained.
Kleiskalie, ligbruin, met baie steenkoolaartjies in onderste 9 dm.; plek-plek effens sanderig; fossiel-draend	1	11	—	—	Clay-shale, light-brown, with many coal-streaks in bottom 9 in.; slightly sandy in parts; fossiliferous.
Sandsteen, middel- tot grofkorrelrig, vuilwit	2	2	—	—	Sandstone, medium- to coarse-grained, dirty white.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Kleiskalie, gelaag, ligbruin, plek- plek sanderig; wryfvlakke by bo-ent, fossieldraend	7	10	—	—	Clay - shale, laminated, light- brown, sandy in parts; slicken- sides at top; fossiliferous.
Kleiskalie, rooi en vaal, plek-plek sanderig	4	10	—	—	Clay-shale, red and grey, sandy in parts.
Skalie, ligbruin tot vaalbruin, plek-plek sanderig met wryf- vlakke in boonste 15 dm.; fossieldraend (41 dm. kern ver- loor tussen 1,200 vt. 10 dm. en 1,231 vt. 6 dm.)	7	0	1,231	6	Shale, light-brown to greyish- brown, sandy in parts, with slickensides in top 15 in.; fossiliferous (41 in. core lost between 1,200 ft. 10 in. and 1,231 ft. 6 in.).
Skalie, swart, boonste paar duim ligbruin, effens sandig na bo	15	0	—	—	Shale, black, top few inches light brown; slightly sandy towards top.
Sandsteen, gelaag, swart tot bruin- agtig, skalieagtig na bo	1	4	—	—	Sandstone, banded, black to brow- nish, shaly towards top.
Sandsteen, fyn- tot grofkorrelrig, vaal	3	11	—	—	Sandstone, fine- to coarse-grained, grey.
Skalie, koolstofhoudend, steen- koolagtig naby onderent	12	9	1,264	6	Shale, carbonaceous, coaly near bottom.
Skalie, koolstofhoudend, en steen- koolagtige skalie met 6 dm. koolstofhoudende sandsteen in middel	5	0	—	—	Shale, carbonaceous, and coaly shale, with 6 in. carbonaceous sandstone in middle.
Skalie, swart en swartbruin.....	2	10	—	—	Shale, black and blackish-brown.
Sandsteen, koolstofhoudend.....	1	0	—	—	Sandstone, carbonaceous.
Skalie, swart, sanderig in middel.	2	3	—	—	Shale, black, sandy in middle.
Skalie, swart, en koolstofhoudende skalie, met verspreide kwarts- korrels	6	8	—	—	Shale, black, and carbonaceous shale, with scattered quartz grains.
Skalie, bruinswart, met kwarts- korrels	8	—	—	—	Shale, brownish-black, with quartz grains.
Sandsteen, swart.....	9	—	—	—	Sandstone, black.
Matkool, swaar.....	6	—	—	—	Coal, dull, heavy.
Skalie met kwartskorrels.....	1	4	—	—	Shale with quartz grains.
Skalie, koolstofhoudend, en swart skalie; steenkoolagtig na middel, bruinerig na onder	7	0	—	—	Shale, carbonaceous, and black shale; coaly in middle, brownish towards bottom.
Sandsteen, swart tot bruinswart, met 'n fynkorrelrige matriks; voorkoms van sandsteen skalie- agtig	6	0	1,298	6	Sandstone, black to brownish- black, with fine-grained matrix; appearance of sandstone shaly.
Matkool, swaar skalieagtig.....	2	2	—	—	Coal, dull, heavy.
Sandsteen, swart, skalieagtig, plek- plek middelkorrelrig	4	10	1,305	6	Sandstone, black, shaly, medium- grained in parts.
Matkool, swaar, skalieagtig en korrelrig na bo, koolstofhou- dend na onder	2	2	—	—	Coal, dull, heavy, shaly and granular towards top, carbona- ceous towards bottom.
Skalie, koolstofhoudend.....	8	—	—	—	Shale, carbonaceous.
Matkool, swaar, skalieagtig.....	2	4	—	—	Coal, dull, heavy, shaly.
Skalie, steenkoolagtig, en skalie- agtige steenkool	1	4	—	—	Shale, coaly, and shaly coal.
Matkool, swaar, korrelrig, kalsiet- houdend, erg sideriethoudend in onderste helfte	2	2	—	—	Coal, dull, heavy, granular, calci- tic, very sideritic in bottom half.

Bg. 123 (verv.)

B.H. 123 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Steenkool, gemeng; hoofsaaklik matkool; korrelrig na bo, sideriethoudend by bo- en onderent, kalsiethoudend (4 dm. kern verloor tussen 1,305 vt. 6 dm. en 1,317 vt.)	2	6	1,317	0	Coal, mixed; mainly dull coal; granular towards top, sideritic at top and bottom calcitic (4 in. core lost between 1,305 ft. 6 in. and 1,317 ft.).
Sandsteen, erg fynkorrelrig, gelaag, vaalbruin tot swartbruin, plek-plek effens mikahoudend	10	3	—	—	Sandstone, very fine-grained, bedded, greyish-brown to blackish-brown; slightly micaceous in parts.
Matkool, swaar; gemengde steenkool en sideriet met 'n bietjie glanskool; 2 dm. sandsteen in middel	1	8	1,328	11	Coal, dull, heavy; mixed coal and siderite with some bright coal; 2 in. sandstone in middle.
Matkool met enkele dun glanskool-lagies na onder; $\frac{1}{2}$ dm. piriet 43 dm. van bo af, en 3 dm. minderwaardige, kalsiethoudende steenkool 12 dm. van onder af; onderste 9 dm. effens skalieagtig; wryfvlak by onderent; piriethoudend in middel (kern erg gebreek)	5	1	—	—	Coal, dull, with occasional thin bright coal-bands towards bottom; $\frac{1}{2}$ in. pyrite 43 in. from top and 3 in. inferior calcitic coal 12 in. from bottom; bottom 9 in. slightly shaly; slickenside at bottom; pyritic in middle (core badly broken).
Steenkool, gemeng; 4 dm. skalie by onderent, erg kalsiethoudend by bo-ent, wryfvlakke by bo- en onderent	1	0	—	—	Coal, mixed; with 4 in. shale at bottom, very calcitic at top, slickensides at top and bottom.
Matkool met enkele glanskool-strepies; 'n pirietknol ($1\frac{1}{2}$ dm.) 15 dm. van onder af; boonste 9 dm. skalieagtig (kern erg gebreek)	3	6	—	—	Coal, dull, with a few bright coal-streaks; a $1\frac{1}{2}$ -in. pyritic nodule 15 in. from bottom, a dirty calcitic band 12 in. from bottom; 9 in. shaly (core badly broken).
Steenkool, gemeng; hoofsaaklik matkool; meer glansend in onderste helfte; 'n siderietlaag (3 dm.) 7 dm. van bo af en 'n siderietlaag (4 dm.) 18 dm. van bo af (kern erg gebreek)	5	9	1,344	3	Coal, mixed; mainly dull coal; brighter in bottom half; a 3-in. sideritic band 7 in. from top and a 4-in. sideritic band 18 in. from top (core badly broken).
Sandsteen, gelaag, swartbruin....	1	3	—	—	Sandstone, bedded, blackish-brown.
Matkool.....	—	8	—	—	Coal, dull.
Sandsteen, erg fynkorrelrig, gelaag, plek-plek golwende lae; wit en donkervaal; swart tot swartvaal in onderste 5 vt.	21	0	—	—	Sandstone, very fine-grained, bedded, wavy bands in parts; white and dark grey; black to blackish-grey in bottom 5 ft.
Sandsteen, boonste helfte vuilvaal, middelkorrelrig, met golwende lagies swart, skalieagtige sandsteen; onderste helfte vuilvaal, massief, grofkorrelrig	5	6	1,372	8	Sandstone, top half dirty grey, medium-grained with wavy layers of black, shaly sandstone; bottom half dirty grey, massive, coarse-grained.
Matkool, glansend na onder (kern gebreek)	2	10	1,375	6	Coal, dull, lustrous towards bottom (core broken).
Sandsteen, erg fynkorrelrig, gelaag, bruinswart tot vaalswart	3	0	1,378	6	Sandstone, very fine-grained, bedded, brownish-black to greyish-black.

BOORGAT 123: GELYKEBULT 70: BOREHOLE 123

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth	Nature of strata	
S 616	N.G.....	Dm. In. 4	Vt. Ft. 988	Dm. In. 0	N.S.
E	Glanskool, gelaag, plek-plek glansend, effens piriët- en kalsiethoudend	22	—		Coal, bright, banded, lustrous in parts, pyritic and calcitic.
D	N.G.....	69	—		N.S.
	Glanskool, gelaag, effens skalieagtig en piriethoudend	11	—		Coal, bright, banded, slightly shaly and pyritic.
	N.G.....	5	—		N.S.
	Glanskool, gelaag.....	15	—		Coal, bright, banded.
C	N.G.....	35	—		N.S.
	Glanskool, gelaag, skalieagtig; 'n wryfvlak by bo-ent	13	—		Coal, bright, banded, shaly; a slickenside at top.
B	N.G.....	55	—		N.S.
	Glanskool, gelaag, erg skalie- agtig, kalsiet- en piriethou- dend in onderste helfte	20	—		Coal, bright, banded, very shaly; calcitic and pyritic in bottom half.
A	N.G.....	5	—		N.S.
	Glanskool, gelaag, plek-plek effens skalieagtig; 1½ dm. skalie 17 dm. van bo af; kalsiethoudend	24	1,010	10	Coal, bright, banded, slightly shaly in parts; 1½ in. shale 17 in. from top; calcitic.
S 617	N.G.....	102	1,029	3	N.S.
E	Glanskool, gelaag, erg skalie- agtig en kalsiethoudend, piriethoudend	26	—		Coal, bright, banded, very shaly and calcitic, pyritic.
D	N.G.....	103	—		N.S.
	Glanskool, gelaag, skalieagtig, erg kalsiet- en piriethou- dend	20	—		Coal, bright, banded, very calcitic and pyritic.
C	N.G.....	14	—		N.S.
	Glanskool, gelaag, skalieagtig naby bo-ent; 2 dm. skalie 11 dm. van onder af	62	—		Coal, bright, banded, shaly near top, 2 in. shale 11 in. from bottom.
B	N.G.....	9	—		N.S.
	Glanskool, gelaag, kalsiet- en effens piriethoudend	14	—		Coal, bright, banded, calcitic and slightly pyritic.
A	N.G.....	19	1,054	2	N.S.
	Glanskool, gelaag, plek-plek skalieagtig; 6 dm. gemengde skalie en steenkool 16 dm. van bo af; piriethoudend in boonste 2 dm.; kalsiethou- dend	32	—		Coal, bright, banded, shaly in parts; 6 in. mixed shale and coal 16 in. from top; pyritic in top 2 in.; calcitic.
S 618	N.G.....	5	1,055	10	N.S.
G	N.G.....	4	—		N.S.
	Glanskool, gelaag, skalieagtig by bo-ent, sideriethoudend	17	—		Coal, bright, banded, shaly at top, sideritic.
	N.G. (3 dm. kern verloor tus- sen 1,055 vt. 10 dm. en 1,061 vt.)	28	1,061	0	N.S. (3 in. core lost between 1,055 ft. 10 in. and 1,061 ft.).
F	N.G.....	195	1,077	3	N.S.
	Glanskool, gelaag, erg skalie- agtig, boonste helfte kalsiet- houdend	18	—		Coal, bright, banded, very shaly, top half calcitic.
	N.G.....	14	—		N.S.

No. van B.N.I.- monster F.R.I. ample no.	Aard van lae	Dikte verkry Thickness recovered	M Ware diepte True depth		Nature of strata
			Vt. Ft.	Dm. In.	
E	Glanskool, gelaag, skalieagtig, kalsiethoudend, enkele pirietlense	Dm. In. 52	Vt. Ft. —	Dm. In. —	Coal, bright, banded, shaly, calcitic, with occasional pyrite lenses.
	N.G.....	4	—	—	N.S.
D	Glanskool, gelaag, erg skalieagtig in onderste tweederdes	27	—	—	Coal, bright, banded, very shaly in bottom two-thirds.
	N.G.....	402	1,120	4	N.S.
C	Glanskool, gelaag, erg skalieagtig, erg sideriethoudend in onderste 16 dm., kalsiethoudend	24	—	—	Coal, bright, banded, very shaly, very sideritic in bottom 16 in., calcitic.
	N.G.....	174	—	—	N.S.
B	Glanskool, gelaag, erg skalieagtig en sideriethoudend in onderste helfte; kalsiethoudend	23	—	—	Coal, bright, banded, very shaly and sideritic in bottom half; calcitic.
	N.G.....	237	—	—	N.S.
A	Glanskool, gelaag, skalieagtig in middelste 3 dm.	24	1,160	6	Coal, bright, banded, shaly in middle 3 in.
46	N.G.....	58	1,305	6	N.S.
	N.G.....	78	—	—	N.S.
B	Matkool, swaar, korrelrig, kalsiethoudend, erg sideriethoudend in onderste helfte	26	—	—	Coal, dull, heavy, granular, calcitic, very sideritic in bottom half.
A	Steenkool, gemeng, hoofsaaklik matkool; korrelrig na bo, sideriethoudend by boen onderent, kalsiethoudend (4 dm. kern verloor tussen 1,305 vt. 6 dm. en 1,317 vt.)	30	1,317	0	Coal, mixed, mainly dull coal; granular towards top, sideritic at top and bottom, calcitic (4 in. core lost between 1,305 ft. 6 in. and 1,317 ft.).
47	N.G.....	20	1,328	11	N.S.
D	Matkool, met enkele dun glanskoollagies na onder; $\frac{1}{2}$ dm. piriet 43 dm. van bo af, en 3 dm. minderwaardige kalsiethoudende steenkool 12 dm. van onder af; onderste 9 dm. effens skalieagtig, wryfvlak by onderent; piriethoudend in middel (kern erg gebreek)	61	—	—	Coal, dull, with occasional thin bright coal-bands towards bottom; $\frac{1}{2}$ in. pyrite 43 in. from top, and 3 in. inferior, calcitic coal 12 in. from bottom; bottom 9 in. slightly shaly; slickenside at bottom; pyritic in middle (core badly broken).
	N.G.....	12	—	—	N.S.
C	Matkool, met enkele glanskoollagies; 'n pirietkool ($1\frac{1}{2}$ dm.) 15 dm. van onder af, 'n vuil kalsiethoudende laag 12 dm. van onder af; boonste 9 dm. skalieagtig (kern erg gebreek)	42	—	—	Coal, dull, with a few bright coal-streaks; a $1\frac{1}{2}$ -in. pyrite nodule 15 in. from bottom, a dirty calcitic band 12 in. from bottom; top 9 in. shaly (core badly broken).
B	Steenkool, gemeng; hoofsaaklik matkool; meer glansend in onderste helfte, 'n siderietlaag (3 dm.) 7 dm. van bo af en 'n siderietlaag (4 dm.) 18 dm. van bo af (kern erg gebreek)	69	—	—	Coal, mixed; mainly dull coal; brighter in bottom half; a 3-in. siderite band 7 in. from top and a 4-in. sideritic band 18 in. from top (core badly broken).
	N.G.....	341	—	—	N.S.
A	Matkool, glansend na onder (kern gebreek)	34	1,375	6	Coal, dull, lustrous towards bottom (core broken).

BOORGAT 124 ; KLEINBERG 471 : BOREHOLE 124

Kern 3½ dm.

Core 3½ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sand.....	6	0	6	0	Sand.
Sand, gekonsolideer.....	31	0	37	0	Sand, consolidated.
Oppervlakkalksteen.....	10	6	—	—	Surface-limestone.
Moddersteen, boonste 20 vt. vaal- geel, res ligblou tot vaal en vaal- blou; onderste 10 vt. plek-plek swart	89	6	137	0	Mudstone, top 20 ft. greyish- yellow, remainder light blue to grey and greyish-blue; bottom 10 ft. black in parts.
Skalie, kleilig, vaal tot vaalswart, met enkele dun steenkoolagies	11	8	—	—	Shale, argillaceous, grey to grey- black, with occasional thin coal- bands.
Glanskool, gelaag, boonste 2 dm. verweer	1	0	—	—	Coal, bright, banded, top 2-in. weathered.
Skalie, donkervaal.....	3	4	153	0	Shale, dark grey.
Glanskool, gelaag, met enkele dun skalielagies; boonste 2 dm. effens verweer, onderste 3 dm. skalieagtig; piriet- en kalsiet- houdend	1	5	—	—	Coal, bright, banded, with occa- sional thin shale bands; top 2 in. slightly weathered, bottom 3 in. shaly; pyritic and calcitic.
Skalie.....	—	4	—	—	Shale.
Glanskool, gelaag, skalieagtig na onder, piriethoudend	—	8	—	—	Coal, bright, banded, shaly towards bottom, pyritic.
Skalie.....	—	4	—	—	Shale.
Glanskool, gelaag, kalsiethoudend na onder	1	3	157	0	Coal, bright, banded, calcitic towards bottom.
Skalie.....	—	3½	—	—	Shale.
Glanskool, gelaag.....	—	5½	—	—	Coal, bright, banded.
Skalie, vaal.....	2	10	—	—	Shale, grey.
Skalielae, breed, gelaagde glans- kool, en skalielae met glanskool	4	10	—	—	Shale bands, broad, bands of banded bright coal, and shale with bright coal.
Skalie, swart, met vyf lae gemeng- de steenkool en skalie van 2 tot 9 dm.	5	7	—	—	Shale, black, with five 2-in. to 5-in. bands of mixed coal and shale.
Glanskool, gelaag, erg skalieagtig en effens piriethoudend	1	5	—	—	Coal, bright, banded, very shaly, and slightly pyritic.
Skalie, swart met 6 dm. steenkool in middel	2	7	—	—	Shale, black, with 6 in. coal in middle.
Skalie en steenkool, gemeng.....	1	4	176	4	Shale and coal, mixed.
Glanskool, gelaag, met 'n dun skalielagie 5 dm. van bo af; kalsiethoudend	1	9	—	—	Coal, bright, banded, with a thin shale band 5 in. from top; calcitic.
Skalie.....	—	6	—	—	Shale.
Glanskool, gelaag, skalieagtig....	1	0	—	—	Coal, bright, banded, shaly.
Skalie en steenkool.....	—	6	—	—	Shale and coal.
Skalie en steenkool, fyn tussenge- laag en effens piriethoudend	5	4	—	—	Shale and coal, interlaminated and slightly pyritic.
Glanskool, gelaag, effens skalie- agtig veral na onder, effens piriethoudend	1	11	—	—	Coal, bright, banded, slightly shaly especially towards bottom, slightly pyritic.
Skalie en fyn tussengelaagde glans- kool	1	9	—	—	Shale and interlaminated bright coal.
Glanskool, gelaag, met 3 dm. skalie 13 dm. van bo af; effens kalsiethoudend, taamlik piriet- houdend na onder	2	5	—	—	Coal, bright, banded, with 3 in. shale 13 in. from top; slightly calcitic, fairly pyritic towards bottom.
Skalie, koolstofhoudend.....	—	3	—	—	Shale, carbonaceous.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
glanskool, gelaag, met 1½ dm. skalie 29 dm. van bo af, plek-plek vitrietagtig	3	9	—	—	Coal, bright, banded, with 1½ in. shale 29 in. from top, vitrainous in parts.
calie.....		6	—	—	Shale.
glanskool en skalie (4 dm. kern verloor tussen 176 vt. 4 dm. en 197 vt. 6 dm.)	1	2	197	6	Coal, bright, and shale (4 in. core lost between 176 ft. 4 in. and 197 ft. 6 in.).
calie, swart, met drie glanskool-lagies (4 tot 9 dm.) in middelste 30 dm.; wryfvlakke naby middel	11	4	—	—	Shale, black, with three 4-in. to 9-in. bright coal-bands in middle 30 in.; slickenside near middle.
glanskool, gelaag, met enkele skalielagies	1	0	—	—	Coal, bright, banded, with a few shale bands.
calie, swart.....	1	3	211	1	Shale, black.
glanskool, gelaag, effens skalie-agtige lagie (1 dm.) 5 dm. van onder af, effens piriethoudend naby middel	1	7½	—	—	Coal, bright, banded, slightly shaly, with a 1-in. shaly band 5 in. from bottom, slightly pyritic near middle.
calie en steenkool.....	1	3½	—	—	Shale and coal.
glanskool, gelaag, sideriethoudend in onderste 2 dm.	2	7	—	—	Coal, bright, banded, sideritic in bottom 2 in.
calie en steenkool, gemeng.....	2	10	—	—	Shale and coal, mixed.
calie, swart.....	6	9	—	—	Shale, black.
glanskool, gelaag, erg skalieagtig en piriethoudend	1	8	227	10	Coal, bright, banded very shaly and pyritic.
calie, swart.....	2	2	—	—	Shale, black.
calielae en skalieagtige glanskool om die beurt	2	11	—	—	Shale, bands alternating with shaly bright coal-bands.
calie, koolstofhoudend.....	1	2	—	—	Shale, carbonaceous.
calielae, breed, en breë lae van glanskool en skalie om die beurt	5	11	—	—	Shale bands, broad, alternating with broad bands of bright coal and shale.
glanskool, gelaag, skalieagtig....	1	7	—	—	Coal, bright, banded, shaly.
calie en steenkool, intiem gemeng; onderste 11 dm. erg sideriethoudend	4	4	—	—	Shale and coal, intimately mixed; bottom 11 in. very sideritic.
calie, swart, en koolstofhoudende skalie, met agt lae gemengde skalie en steenkool van 3 tot 10 dm., en glanskool	7	0	—	—	Shale, black, and carbonaceous shale, with eight 3-in. to 10-in. bands of mixed shale and coal, and bright coal.
calie, swart, met agt-en-twintig lagies glanskool en gemengde steenkool en skalie van 2 tot 8 dm.; sommige erg sideriethoudend	34	8	287	7	Shale, black, with twenty-eight 2-in. to 8-in. bands of bright coal and mixed coal and shale; some very sideritic.
glanskool, gelaag, met 'n skalie-agtige lagie (2 dm.) 6 dm. van onder af; sideriethoudend	2	0	289	7	Coal, bright, banded, with a 2-in. shaly band 6 in. from bottom; sideritic.
calie, swart, en koolstofhoudende skalie, met baie dun lagies steenkool en steenkool gemeng met skalie; verspreide kwartskorrels 24 vt. van onder af; onderste 10 vt. steenkoolagtig	72	8	—	—	Shale, black, and carbonaceous shale, with many thin bands of coal and coal mixed with shale; quartz grains 24 ft. from bottom; bottom 10 ft. coaly.
calie, koolstofhoudend, skalie-agtige steenkool, en 'n bietjie skalieagtige glanskool	13	3	—	—	Shale, carbonaceous, shaly coal, and some shaly bright coal.
calie, swart, met 'n bietjie swaar matkool	7	8	—	—	Shale, black, with some heavy dull coal.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sandsteenlae, breed, vuilwit, fyn- tot middelkorrelrig, breë lae swart, skalieagtige sandsteen en breë lae vaal tot swart skalie, om die beurt	19	4	—	—	Sandstone bands, broad, c white, fine- to medium-grain alternating with broad band black, shaly sandstone broad bands of grey to b shale.
Skalie, ligbruin.....	22	4	424	10	Shale, light brown.
Skalie, steenkoolagtig, skalieagtige steenkool en koolstofhoudende skalie	5	6	—	—	Shale, coaly, shaly coal and bonaceous shale.
Skalie, swart, effens sanderig....	9	0	—	—	Shale, black, slightly sandy.
Sandsteen.....		9	—	—	Sandstone.
Skalie, swartbruin, steenkoolagtige skalie en 'n bietjie swaar mat- kool	15	3	—	—	Shale, blackish-brown, coaly s and a little heavy dull coal
Skalie, ligbruin tot vaalbruin....	6	9	—	—	Shale, light brown to grey brown.
Skalie, swart, met 'n bietjie skalie- agtige steenkool	6	10	—	—	Shale, black, with a little s coal.
Sandsteen, fyn- tot grofkorrelrig, veldspaties	20	1	—	—	Sandstone, fine- to coarse-grai felspathic.
Skalie, swart, sanderig.....	9	1	—	—	Shale, black, sandy.
Sandsteen, fyn- tot middelkorrel- rig, veldspaties, wit tot vaalwit, met baie golwende lagies en lense van glanskool en skalie	11	8	509	9	Sandstone, fine- to mediu grained, felspathic, white greyish-white, with many w layers and lenses of bright and shale.
Matkool en skalieagtige matkool.		6	510	3	Coal, dull, and shaly dull coa
Steenkool, gemeng; hoofsaaklik glanskool na onder; 'n sideriet- houdende lagie (1½ dm.) 6 dm. van bo af en groot sideriethou- dende lense deurgaans	2	11	513	2	Coal, mixed; mainly dull towards top and mainly br coal towards bottom; a 1- sideritic band 6 in. from and large sideritic le throughout.
Sandsteen, fynkorrelrig, gelaag, ligbruin, wit, plek-plek met gol- wende lagies	7	9	—	—	Sandstone, fine-grained, bed light brown, white, with v layers in parts.
Matkool, glansend.....	1	0	—	—	Coal, dull, lustrous.
Sandsteen, koolstofhoudend.....		4	523	3	Sandstone, carbonaceous.
Matkool; effens meer glansend na onder; piriët-en sideriethoudend in onderste 6 dm.	2	6	—	—	Coal, dull; slightly brig towards bottom; pyritic sideritic in bottom 6 in.
Matkool; glanskool in boonste 4 dm.; en gemengde, hoofsaak- lik matkool; in onderste 9 dm.; erg piriethoudend	3	1	—	—	Coal, dull; bright coal in top and mixed, mainly dull coa bottom 9 in.; very pyritic.
Steenkool, erg sideriethoudend...		10	—	—	Coal, very sideritic.
Steenkool, gemeng; hoofsaaklik glanskool, met 'n piriëtknol (1 dm.) 2½ dm. van bo af, 'n halfduim piriëtknol 24 dm. van bo af, en piriethoudend in onderste 18 dm.; effens kalsiet- houdend met 'n steenkoolagtige skalielagie (1 dm.) 3 dm. van onder af	5	2	—	—	Coal, mixed; mainly bright with a 1-in. pyrite nodule 2 from top, ½-in. pyrite no 24 in. from top and pyrit bottom 18 in.; slightly cal with a 1-in. coaly shale 1 3 in. from bottom.
Steenkool, gemeng; hoofsaaklik glanskool; effens piriethoudend	1	11	536	10	Coal, mixed; mainly bright slightly pyritic.
Skalie, steenkoolagtig, met baie wryfvlakke		3	—	—	Shale, coaly, with nume slickensides.

Bg. 124 (verv.)

B.H. 124 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
ndsteen, grofkorrelrig, vaalwit ot swart	1	7	—	—	Sandstone, coarse-grained, greyish -white to black.
enkool.....		7	—	—	Coal.
lie, swart, sanderig, met baie un sandsteenlagies in onderste elfte	6	3	—	—	Shale, black, sandy, with nume- rous thin sandstone bands in bottom half.
ndsteen, grofkorrelrig, vuilvaal.	3	6	—	—	Sandstone, coarse-grained, dirty grey.
lie, swart, effens sanderig....	4	10	—	—	Shale, black, slightly sandy.
ndsteen, fyn- tot middelkorrel- ig, wit, massief, veldspaties, met twee dun steenkoollagies n enkele golwende lagies	26	0	579	10	Sandstone, fine- to medium- grained, white, massive, fels- pathic, with two thin coal bands and an occasional wavy layer.

BOORGAT 124 : KLEINBERG 471 : BOREHOLE 124

O. van N.I.- onster R.I. ple no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
		Dm. In.	Vt. Ft.	Dm. In.	
41	N.G..... Glanskool, gelaag, met enkele dun skalielagies; boonste 2 dm. effens verweer, onder- ste 3 dm. skalieagtig; piri- eten kalsiethoudend	40 17	153 —	0	N.S. Coal, bright, banded, with occasional thin shale bands; top 2 in. slightly weathered; bottom 3 in. pyritic and calcitic.
A	N.G..... Glanskool, gelaag, skalieagtig na onder, piriethoudend	4 8	— —		N.S. Coal, bright, banded, shaly towards bottom, pyritic.
	N.G..... Glanskool, gelaag, kalsiethou- dend na onder	4 15	— 157	0	N.S. Coal, bright, banded, calcitic towards bottom.
42	N.G..... Glanskool, gelaag, met 'n dun skalielagie 5 dm. van bo af; kalsiethoudend	16 21	176 —	4	N.S. Coal, bright, banded; with thin shale band 5 in. from top; calcitic.
	N.G..... Glanskool, gelaag, effens skalieagtig veral na onder, effens piriethoudend	88 23	— —		N.S. Coal, bright, banded; slightly shaly especially towards bot- tom, slightly pyritic.
C	N.G..... Glanskool, gelaag, met 3 dm. skalie 13 dm. van bo af; effens kalsiethoudend, taamlik piriethoudend na onder	21 29	— —		N.S. Coal, bright, banded, with 3 in. shale 13 in. from top; slightly calcitic, fairly pyritic towards bottom.
B	N.G.....	3	—		N.S.

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
		Dm. In.	Vt. Ft.	Dm. In.	
A	Glanskool, gelaag, met 1½ dm. skalie 29 dm. van bo af, plek-plek vitrietagtig N.G. (4 dm. kern verloor tussen 176 vt. 4 dm. en 197 vt. 6 dm.)	45 20	— 197	— 6	Coal, bright, banded, with 1 in. shale 29 in. from top vitrainous in parts. N.S. (4 in. core lost between 176 ft. 4 in. and 197 ft. 6 in.)
T 43 C	N.G. Glanskool, gelaag, effens skalieagtig, met 'n skalieagtige lagie (1 dm.) 5 dm. van onder af, effens priet-houdend naby middel	15 19½	211 —	1	N.S. Coal, bright, banded, slightly shaly with a 1-in. shaly band 5 in. from bottom, slightly pyritic near middle.
B	N.G. Glanskool, gelaag, sideriet-houdend in onderste 2 dm.	15½ 31	— —	—	N.S. Coal, bright, banded, sideritic in bottom 2 in.
A	N.G. Glanskool, gelaag, erg skalieagtig en priet-houdend	115 20	— 227	— 10	N.S. Coal, bright, banded, very shaly and pyritic.
T 44 B	N.G. Glanskool, gelaag, met 'n 2 dm. skalieagtige lagie 6 dm. van onder af; sideriet-houdend	416 24	287 289	7 7	N.S. Coal, bright, banded, with 2-in. shaly band 6 in. from bottom; sideritic.
A	N.G. Steenkool, gemeng; hoofsaaklik matkool na bo en hoofsaaklik glanskool na onder; 'n sideriet-houdende lagie (1½ dm.) 6 dm. van bo af en groot sideriet-houdende lense deurgaans	2,651 35	510 513	3 2	N.S. Coal, mixed; mainly dull coal towards top and mainly bright coal towards bottom; a 1½-in. sideritic band 6 in. from top and large sideritic lenses throughout.
T 45 D	N.G. Matkool, effens meer glansend na onder; priet- en sideriet-houdend in onderste 6 dm.	4 30	523 —	3	N.S. Coal, dull; slightly brighter towards bottom; pyritic and sideritic in bottom 6 in.
C	Matkool; glanskool in boonste 4 dm., en gemengde hoofsaaklik matkool in onderste 9 dm.; erg priet-houdend	37	—	—	Coal, dull; bright coal in top 4 in. and mixed, mainly dull coal in bottom 9 in.; very pyritic.
B	N.G. Steenkool, gemeng; hoofsaaklik glanskool, met 'n prietknol (1 dm.) 2½ dm. van bo af, 'n halfduim prietknol 24 dm. van bo af, en priet-houdend in onderste 18 dm.; effens kalsiet-houdend met 'n steenkoolagtige skalielagie (1 dm.) 3 dm. van onder af	10 62	— —	—	N.S. Coal, mixed; mainly bright coal, with a 1-in. pyritic nodule 2½ in. from top, a ½-in. pyrite nodule 24 in. from top, and pyritic in bottom 18 in.; slightly calcitic with a 1-in. coaly shale band 3 in. from bottom.
A	Steenkool, gemeng; hoofsaaklik glanskool; effens priet-houdend	23	536	10	Coal, mixed; mainly bright coal; slightly pyritic.

BOORGAT 124 : KLEINBERG 471 : BOREHOLE 124

ANALISE VAN LUGGEDROOGDE STEENKOOI

ANALYSIS OF AIR-DRIED COAL

No. van B.N.I.-monster F.R.I. sample no.	DIKTE (Dm.) THICKNESS (In.)		RU-STEENKOOI RAW COAL					WASTOETS WASHING TEST		DRY-STOP FLOAT						SINK- STOP SINK		
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	Groot- te (Dm.) Size (In.)	S.G.	Op- brengs Yield %	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	As Ash %
T 41 A	8 232	40	—	—	22.2	—	—	—	$-\frac{3}{16}$	1.40	38.5	—	4.6	8.5	35.9	51.0	2	30.8
T 42 D	— 88	21	—	—	19.2	—	—	—	$-\frac{3}{16}$	1.40	48.2	—	4.0	7.9	35.6	52.5	3½	29.8
C	— 21	23	—	—	22.9	—	—	—	$-\frac{3}{16}$	1.40	38.4	—	4.6	8.4	35.7	51.3	3½	32.0
B	— 3	29	—	—	25.8	—	—	—	$-\frac{3}{16}$	1.40	37.4	—	4.1	7.4	35.8	52.7	3	36.8
A	— 183	45	—	—	19.9	—	—	—	$-\frac{3}{16}$	1.40	52.1	—	4.0	8.7	35.6	51.7	3	32.1
T 43 C	— 15½	19½	—	2.1	28.6	33.2	36.1	1.4g	$-\frac{3}{16}$	1.40	25.3	—	—	—	—	—	—	—
B	— 115	31	—	—	16.8	—	—	—	$-\frac{3}{16}$	1.40	49.3	—	4.3	6.5	34.6	54.6	1½	26.9
A	— 717	20	—	2.5	27.3	33.7	36.5	1½	$-\frac{3}{16}$	1.40	27.8	—	—	—	—	—	—	—

Bg. 124 (verv.)

B.H. 124 (contd.)

No. van B.N.I.-monster F.R.I. sample no.	Dikte (Dm.) Thickness (In.)		RU-STEENKOOL RAW COAL						WASTOETS WASHING TEST		DRY-TOF FLOAT						SINK- STOF SINK	
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swell- syfer Swell- ling number	Groot- te (Dm.) Size (In.)	S.G.	Op- brengs Yield %	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swell- syfer Swell- ling number	As Ash %
T 44 B	— 2,648	24	—	—	21.1	—	—	—	— ^{3/16}	1.40	39.5	—	3.4	7.4	36.6	52.6	3	30.0
A	121	35	—	—	26.0	—	—	—	—	1.58	59.9	11.3	3.3	16.8	23.0	56.9	F	39.7
D	—	30	—	—	25.4	—	—	—	—	1.58	55.6	11.4	3.7	15.3	23.1	57.9	F	38.0
C	10	37	—	—	23.5	—	—	—	—	1.58	69.4	11.4	3.5	16.9	22.9	56.7	F	38.4
B	—	62	—	—	17.2	—	—	—	—	1.35	22.9	13.5	3.5	5.2	33.4	57.9	2	—
										1.35	59.5	12.1	3.4	13.2	25.6	57.8	14g	46.2
										1.58	82.4*	12.5*	3.4*	11.0*	27.7*	57.9*	—	—
A	—	23	—	—	16.4	—	—	—	—	1.35	21.3	13.6	2.9	6.1	36.4	54.6	3	—
										1.35	63.2	12.2	3.0	13.7	26.3	57.0	F	41.5
										1.58	84.5*	12.6*	3.0*	11.8*	28.8*	56.4*	—	—

* Bereken / Calculated.

BOORGAT 125 : WELGEVONDEN 165 : BOREHOLE 125

Kern 3½ dm.

Core 3½ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
d.....	10	0	—	—	Sand.
dsteen, ligrooi, word wit na nder (Holkranssandsteen)	112	4	122	4	Sandstone, light pink, becoming white towards bottom (Cave Sandstone).
dsteen, baie fynkorrelrig, lig- ers, wit, ligrooi, met baie kalk- oudende knolle en sliksteen Rooilae)	280	0	484	2	Sandstone, very fine-grained, light purple, white, light pink, with many calcareous nodules and siltstone (Red Beds).
dsteen, fyn- tot middelkorrel- g, plek-plek grintagtig, met oelklippies tot 1½ dm. deur- ree; plek - plek kruisgelaag, lek-plek veldspaties, slegs vyf un moddersteenlagies kom oor; vaalrooi, vaalbruin, vaal- it en vuilvaal (Moltenolae)	98	0	582	2	Sandstone, fine- to medium- grained, gritty in parts, with pebbles up to 1½ in. in diameter, cross-bedded in parts, felspathic in parts, only five thin mudstone bands occur, grey-pink, grey- brown, grey-white and dirty grey (Molteno Beds).
ldersteen, ligvaal, plek-plek et kalsiethoudende dele; on- erste 4 vt. swart (1½ dm. kern un hier af)	352	9	934	11	Mudstone, light grey, with calcitic portions in parts; bottom 4 ft. black (1½ in. core from here).
ielae en glanskoolae om die urt	2	2	937	1	Shale bands and bright coal-bands alternating.
iskool, gelaag; piriethoudend a onder	1	7	938	8	Coal, bright, banded; pyritic towards bottom.
ie, swart en vaalswart.....	7	0	—	—	Shale, black and grey-black.
iskool, gelaag, met 'n groot rietknol naby die middel; fens skalieagtig en kalsiethou- end	1	0	—	—	Coal, bright, banded, with a large pyrite nodule near middle; slightly shaly and calcitic.
ie, swart, met steenkoolagtige le	9	2	—	—	Shale, black, with coaly parts.
iskool, gelaag, met ½ dm. alie 2 dm. van bo af, onderste elfte erg skalieagtig	1	4	—	—	Coal, bright, banded, with ½ in. shale 2 in. from top, bottom half very shaly.
ie, swart, met steenkoolagies onderste helfte	6	2	—	—	Shale, black, with coal-bands in bottom half.
ielae, breed, en breë lae van tiem gemengde koolstofhou- ende skalie en gemengde skalie- gtige steenkool	21	5	984	9	Shale bands, broad, and broad bands of intimately mixed car- bonaceous shale and mixed shaly coal.
iskool, gelaag, met baie dun alielagies wat toeneem na nder; taamlik kalsiethoudend, fens piriethoudend	2	6	—	—	Coal, bright, banded, with many thin shale bands increasing towards bottom; fairly calcitic, slightly pyritic.
ie.....	1	0	—	—	Shale.
iskoollagies en skalielagies om e beurt	2	4	—	—	Coal, bright, thin bands alterna- ting with thin shale bands.
iskool, gelaag, met 'n paar dun alielagies in boonste deel; dm. skalie 7 dm. van onder; kalsiet- en effens piriethou- end	3	10	—	—	Coal, bright, banded, with a few thin shale bands towards top; 1½ in. shale 7 in. from bottom; calcitic and slightly pyritic.
ielae en intiem gemengde lae un steenkool en skalie om die urt	3	0	—	—	Shale bands and bands of inti- mately mixed coal and shale alternating.
iskool, gelaag, effens kalsiet- houdend	2	3	—	—	Coal, bright, banded, slightly calcitic.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Skalie.....			—		Shale.
Glanskool, gelaag, met baie dun skalielagies	1	2	—		Coal, bright, banded, with thin shale bands.
Skalie, koolstofhoudend.....	2	11	—		Shale, carbonaceous.
Skalie en intiem gemengde steenkool en skalie	1	5	—		Shale and intimately mixed and shale.
Skalie, vaalswart.....	3	7½	—		Shale, light grey.
Glanskool, gelaag, met baie dun koolstofhoudende skalielagies; groot piriethoude in onderste 6 dm.; effens sideriethoudend na onder en onderste 1 dm. erg skalieagtig	3	0½	—		Coal, bright, banded, with thin carbonaceous shale bands; large pyrite nodules in bottom 6 in.; slightly sideritic towards bottom and bottom 1 in. shaly.
Skalie, swart, plek-plek koolstofhoudend, met agt 2 dm. tot 9 dm. skalieagtige steenkoolae	23	2	—		Shale, black, carbonaceous parts, with eight 2-in. to shaly coal-bands.
Glanskool, gelaag, met 3 dm. skalie 6 dm. van bo af; piriethoudend in boonste 2 dm.; deurgaans taamlk skalieagtig	2	6	1,038	0	Coal, bright, banded, with shale 6 in. from top; pyritic top 2 in.; fairly shaly throughout.
Skalie, swart.....	1	0	1,039	0	Shale, black.
Glanskool, gelaag, met baie dun skalielagies; 5½ dm. skalie 26 dm. van bo af, 4½ dm. skalie 41 dm. van bo af en 2 dm. skalie 16 dm. van onder af; effens kalsiet- en piriethoudend	6	5	—		Coal, bright, banded, with thin shale bands; 5½ in. shale 26 in. from top, 4½ in. shale 41 in. from top and 2 in. shale 16 in. from bottom; slightly calcitic and pyritic.
Skalielae, breed, en breë gelaagde glanskoolae om die beurt	4	9	1,050	2	Shale bands, broad, alternating with broad bands of bright coal.
Skalie en steenkool.....	15	2½	1,065	4½	Shale and coal.
Glanskool, gelaag, met enkele dun skalielagies veral in onderste en boonste dele; kalsiethoudend, sideriethoudend in onderste 4 dm.	1	6½	—		Coal, bright, banded, with occasional thin shale bands especially towards top and bottom; calcitic, sideritic in bottom 4 in.
Skalie en steenkool.....	2	11	—		Shale and coal.
Steenkool, gemeng; hoofsaaklik glanskool; taamlk sideriethoudend in boonste 20 dm. en kalsiethoudend in onderste 14 dm., piriethoudend in die middel	3	7	—		Coal, mixed; mainly bright with fairly sideritic in top 20 in. calcitic in bottom 14 in., pyritic in the middle.
Skalie, koolstofhoudend, met glanskool, by onderent		7	—		Shale, carbonaceous, with bright coal at bottom.
Skalie en steenkool.....	4	4	—		Shale and coal.
Glanskool met enkele skalielagies; erg kalsiet- en piriethoudend na onder	1	3	1,079	9	Coal, bright, with occasional thin shale bands; very calcitic and pyritic towards bottom.
Skalie en steenkool.....	8	5	—		Shale and coal.
Steenkool, gemeng; hoofsaaklik glanskool met baie dun skalielagies; 6 dm. skalie 21 dm. van bo af en 4 dm. skalie 8 dm. van onder af; onderste 8 dm. erg skalieagtig	3	9	—		Coal, mixed; mainly bright with many thin shale bands; 6 in. shale 21 in. from top, 4 in. shale 8 in. from bottom, bottom 8 in. very shaly.
Skalie en steenkool.....	2	2	1,094	1	Shale and coal.
Glanskool, gelaag, kalsiet- en erg piriethoudend	1	2	—		Coal, bright, banded, calcitic, very pyritic.
Skalie.....		2	—		Shale.
Steenkool, gemeng; hoofsaaklik glanskool; effens skalieagtig; erg piriethoudend in onderste 4 dm.	10		1,096	3	Coal, mixed; mainly bright with slightly shaly; very pyritic towards bottom 4 in.

g. 125 (verv.)

B.H. 125 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
e, swart, met twee dun en koolagies	4	0	—	—	Shale, black, with two thin coal-bands.
skool, hoofsaaklik, baie ska- agies veral onder en in die iddel; kalsiethoudend en effens eriethoudend in middel	4	10	—	—	Coal, mainly bright, many shale bands especially towards bottom and middle; calcitic and slightly sideritic in middle.
elae, breed, en breë lae van laagde glanskool en skalie om beurt	5	7	—	—	Shale bands, broad, alternating with broad bands of bright coal and shale.
skool, hoofsaaklik glansend t baie skalielagies; erg kalsiet- houdend en taamlik piriet- en eriethoudend	3	3	—	—	Coal, mainly bright, with many shale bands; very calcitic and fairly pyritic and sideritic.
e, swart, met enkele steen- koolagies	4	10	—	—	Shale, black, with occasional thin coal-bands.
skool, gelaag, kalsiet- en eriethoudend	1	3	1,120	0	Coal, bright, banded, calcitic and pyritic.
e, swart, en koolstofhoudende lie, met baie dun steenkool- agies	18	7	—	—	Shale, black, and carbonaceous shale, with many thin coal-bands.
e, steenkoolagtig, en skalie- ge steenkool	10	5	1,149	0	Shale, coaly and shaly coal.
skool, gemeng, hoofsaaklik skool, met groot pirietlense; ns kalsiethoudend	4	8	—	—	Coal, mixed, mainly dull, with large lenses; slightly calcitic.
skool, gemeng, hoofsaaklik skool, met groot pirietlense; ns kalsiethoudend in boonste 1	4	7	—	—	Coal, mixed, mainly dull coal, with large pyrite lenses; slightly calcitic towards top.
e, steenkoolagtig, en skalie- ge steenkool	1	2	—	—	Shale, coaly, and shaly coal.
e, koolstofhoudend.....		10	—	—	Shale, carbonaceous.
skool, hoofsaaklik matkool n paar dun skalielagies; ethoudend	1	1	1,161	4	Coal, mainly dull coal with a few thin shale bands; pyritic.
teen, grofkorrelrig, wit, ns veldspaties; boonste 4 dm. lieagtig en ligbruin	12	5	—	—	Sandstone, coarse-grained, white, slightly feldspathic; top 4 in. shaly and light brown.
teenlagies, fyn- tot middel- relrig, en bruin tot swart dersteen- en skalielagies, om beurt; fossielhoudend	11	7	—	—	Sandstone, fine- to medium-grained beds alternating with brown to black bands of mudstone and shale; fossiliferous.
ersteen, bruin, fossielhou- d	5	0	—	—	Mudstone, brown, fossiliferous.
ersteen en steenkool.....	1	0	—	—	Mudstone and coal.
e, swart, en koolstofhoudende lie, met steenkoolagtige deel-	11	0	1,203	6	Shale, black, and carbonaceous shale, with coaly parts.
ool, swaar, korrelrig in boon- 36 dm.; verspreide piriet- ille kom voor; 4 dm. kool- houdende skalie 8 dm. van er af	4	1	—	—	Coal, dull, heavy, granular in top 36 in.; scattered pyrite nodules occur; 4 in. carbonaceous shale 8 in. from bottom.
e, swart.....	1	10	—	—	Shale, black.
e, steenkoolagtig, en skalie- ge steenkool	2	1	—	—	Shale, coaly, and shaly coal.
ool, swaar, 1 dm. skalie 13 van onder af en 'n ½ dm. etkool 8 dm. van onder af	3	1	1,214	7	Coal, dull, heavy, 1 in. shale 13 in. from bottom and a ½-in. pyrite nodule 8 in. from bottom.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Skalie, swart, plek-plek koolstofhoudend	23	5	1,240	0	Shale, black, carbonaceous parts.
Matkool, korrelrig, met enkele dun skalieagtige lagies; 'n groot pirietskool by onderent (kern erg gebreek)	6	2	—	—	Coal, dull, granular, with occasional thin shaly bands; a large pyrite nodule at bottom (badly broken).
Matkool, korrelrig, meer glansend in boonste helfte; piriethoudend en met enkele dun skalielagies onderin	7	10	—	—	Coal, dull, granular, more lustrous in top half; pyritic and occasional thin shale bands towards bottom.
Matkool, glansend, met enkele pirietskoolle en plek-plek met 'n korrelrige voorkoms	8	8	—	—	Coal, dull, lustrous, with occasional pyrite nodules and a granular appearance in places.
Steenkool, gemeng; hoofsaaklik glanskool wat onder toe oorgaan in erg glansende steenkool; effens sideriethoudend en taamlik piriethoudend	2	4	1,265	0	Coal, mixed; mainly bright, merging into very bright towards bottom; slightly pyritic and fairly pyritic.
Sandsteen, fynkorrelrig, fyngelaag, swart en vuilvaal; skalieagtig en met steenkool by onderent	9	9	—	—	Sandstone, fine-grained, well laminated, black and dirty grey, shaly and with coal at bottom.
Skalie, koolstofhoudend.....		8	1,275	5	Shale, carbonaceous.
Steenkool, gemeng, hoofsaaklik mat; enkele 1 dm. tot 1½ dm. sanderige skalielagies kom voor; plek-plek effens korrelrig; effens sideriethoudend; piriethoudend; skalieagtig 78 dm. van onder af; wryfvlak naby onderent	13	9	1,289	2	Coal, mixed, mainly dull, with occasional 1-in. to 1½-in. shaly bands occur; slightly granular in parts; slightly pyritic; pyritic; shaly 78 in. from bottom; slickenside near top.
Sandsteen, fynkorrelrig, vaal, vuilvaal, plek-plek vaalswart; kruisgelaag met sanderige skalielagies in onderste 6 vt.	25	10	—	—	Sandstone, fine-grained, grey, clayey; grey-black in parts; cross-bedded with sandy shale bands in bottom 6 ft.
Matkool, glansend, effens piriethoudend	5	1	1,320	1	Coal, dull, lustrous, slightly pyritic.
Matkoolle, glansend; gemengde steenkoolle en sandsteenle om die beurt	1	10	—	—	Coal-bands, dull, lustrous; clayey bands, mixed and sandstone bands alternating.
Sandsteen, vuilvaal, middelkorrelrig	2	6	1,324	5	Sandstone, dirty grey, medium-grained.

NOTA.—Al die diktes en dieptes tussen 1,050 vt. 2 dm. en 1,096 vt. 3 dm. is hoogs onvertroubaar. Die beskrywings van die individuele steenkoolle is egter korrek. Die onreëlmatigheid is te wyte aan die foutiewe notering en uitleg van kern deur die boorman.

NOTE.—All the thicknesses and depths between 1,050 ft. 2 in. and 1,096 ft. 3 in. are most unreliable. The descriptions of the individual coal-seams, however, are correct. The anomaly is due to faulty noting down and layout of core by the driller.

BOORGAT 125 : WELGEVONDEN 165 : BOREHOLE 125

o. van N.I.- onster R.I. ple no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
			Dm. In.	Ft. In.	
200 A	N.G..... Glanskool, gelaag; piriethou- dend onderin	26 19	937 938	1 8	N.S. Coal, bright, banded; pyritic towards bottom.
201 F	N.G..... Glanskool, gelaag, met baie dun skalielagies wat toe- neem na onder; taamlik kalsiethoudend	257 30	984 —	9	N.S. Coal, bright, banded, with many thin shale bands in- creasing towards bottom; fairly calcitic.
E	N.G..... Glanskoolagies en skalielagies om die beurt	12 28	— —	—	N.S. Coal, thin bright bands alter- nating with thin shale bands.
D	Glanskool, gelaag, met 'n paar dun skalielagies bo in; 1½ dm. skalie 7 dm. van onder af; kalsiet- en effens piriethou- dend	46	—	—	Coal, bright, banded, with a few thin shale bands towards top; 1½ in. shale 7 in. from bottom; calcitic and slightly pyritic.
C	N.G..... Glanskool, gelaag, effens kal- siethoudend	36 27	997 —	3	N.S. Coal, bright, banded, slightly calcitic.
B	N.G..... Glanskool, gelaag, met baie dun koolstofhoudende ska- lielagies; groot pirietskalle in onderste 6 dm.; effens sideriethoudend onderin en onderste 1 dm. erg skalie- agtig	115½ 36½	— —	—	N.S. Coal, bright, banded, with many thin carbonaceous shale bands; large pyrite nodules in bottom 6 in.; slightly sideritic towards bot- tom and bottom 1 in. very shaly.
A	N.G..... Glanskool, gelaag, met 3 dm. skalie 6 dm. van bo af uit- gesluit; piriethoudend in boonste 2 dm.; deurgaans taamlik skalieagtig	278 30	— 1,038	0	N.S. Coal, bright, banded, with 3 in. shale 6 in. from top exclu- ded; pyritic in top 2 in.; fairly shaly throughout.
202 D	N.G..... Glanskool, gelaag, met baie dun skalielagies; 5½ dm. skalie 26 dm. van bo af uit- gesluit; 4½ dm. skalie 41 dm. van bo af uitgesluit en 2 dm. skalie 16 dm. van onder af; effens kalsiet- en piriethou- dend	12 77	1,039 —	0	N.S. Coal, bright, banded, with many thin shale bands; 5½ in. shale 26 in. from top exclu- ded; 4½ in. shale 41 in. from top excluded and 2 in. shale 16 in. from bottom; slightly calcitic and pyritic.
C	N.G..... N.G..... Glanskool, gelaag, met enkele dun skalielagies veral in onderste en boonste dele; kalsiethoudend; sideriet- houdend in onderste 4 dm. N.G.....	57 182½ 18½ 35	1,050 — — —	2	N.S. N.S. Coal, bright, banded, with occasional thin shale bands especially towards bottom and top; calcitic; sideritic in bottom 4 in. N.S.

Bg. 125 (verv.)

B.H. 125 (contd.)

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
		Dm. In.	Vt. Ft.	Dm. In.	
B	Steenkool, gemeng; hoofsaaklik glanskool; taamlik sideriethoudend in boonste 20 dm.; piriethoudend in die middel	43	—		Coal, mixed; mainly bright coal; fairly sideritic in top 20 in.; piritic in middle.
A	N.G..... Glanskool met enkele skalielagies; erg kalsiet- en piriethoudend na onder	59 15	— 1,079	9	N.S. Coal, bright, with occasional shale bands; very calcitic and pyritic towards bottom.
T 203	N.G..... Glanskool, gelaag, kalsiet- en erg piriethoudend	26 14	1,094 —	1	N.S. Coal, bright, banded, calcitic and very pyritic.
D	N.G..... Steenkool, gemeng, hoofsaaklik glanskool; effens skalieagtig; erg piriethoudend in onderste 4 dm.	2 10	— 1,096	3	N.S. Coal, mixed; mainly bright coal; slightly shaly; very pyritic in bottom 4 in.
C	N.G..... Glanskool hoofsaaklik, met baie skalielagies veral onderin en in die middel; kalsiethoudend; effens sideriethoudend in middel	48 58	— —		N.S. Coal, mainly bright with many shale bands especially towards bottom and middle; calcitic; slightly sideritic in middle.
B	N.G..... Steenkool; hoofsaaklik glanskool, met baie skalielagies; erg kalsiethoudend en taamlik piriethoudend	67 39	— —		N.S. Coal, mainly bright coal; with many shale bands; very calcitic and fairly pyritic and sideritic.
A	N.G..... Glanskool, gelaag, kalsiet- en piriethoudend	58 15	— 1,120	0	N.S. Coal, bright, banded, calcitic and pyritic.
T 204	N.G..... Steenkool, gemeng; hoofsaaklik matkool, met groot piriethoudend; effens kalsiethoudend	125 56	1,149 —	0	N.S. Coal, mixed; mainly dull coal with large pyrite lenses; slightly calcitic.
C	Steenkool, gemeng; hoofsaaklik matkool met groot piriethoudend; effens kalsiethoudend bo-in	55	—		Coal, mixed; mainly dull coal with large pyrite lenses; slightly calcitic towards top.
B	N.G..... Matkool, swaar; korrelrig in boonste 36 dm.; verspreide piriethoudende skalies 8 dm. van onder af uitgesluit	517 49	— —		N.S. Coal, dull, heavy; granular top 36 in.; scattered pyrite nodules occur; 4 in. carbonaceous shale 8 in. from bottom excluded.
A	N.G..... Matkool, swaar; 1 dm. skalie 13 dm. van onder af en 'n 1½ dm. piriethoudende skaalies 8 dm. van onder af	47 37	— 1,214	7	N.S. Coal, dull, heavy; 1 in. shale 13 in. from bottom and 1½ in. pyrite nodule 8 in. from bottom.

Bg. 125 (verv.)

B.H. 125 (contd.)

o. van N.I.- onster R.R.I. aple no.		Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
			<i>Dm.</i> <i>In.</i>	<i>Vt.</i> <i>Ft.</i>	<i>Dm.</i> <i>In.</i>	
205	N.G.....		281	1,240	0	N.S.
F	Matkool, korrelrig, met enkele dun skalieagtige lagies; 'n groot pirietknol by onder- ent (kern erg gebreek)	74		—		Coal, dull, granular, with occa- sional thin shaly bands; a large pyrite nodule at bottom (core badly broken).
E	Matkool, korrelrig; meer glans- send in boonste helfte; piriethoudend en met enkele dun skalielagies na onder	94		—		Coal, dull, granular; more lustrous in top half; pyritic and with occasional thin shale bands towards bottom.
D	Matkool, glansend, met enkele pirietknolle; plek-plek met 'n korrelrige voorkoms	104		—		Coal, dull, lustrous, with occa- sional pyrite nodules and with a granular appearance in places.
C	Steenkool, gemeng; hoofsaak- lik glanskool wat oorgaan in erg glansende steenkool na onder; effens sideriet- houdend en taamlik piriet- houdend	28		1,265	0	Coal, mixed; mainly bright, merging into very bright coal towards bottom; slightly sideritic and fairly pyritic.
B	N.G.....	125		1,275	5	N.S.
	Steenkool, gemeng; hoofsaak- lik matkool; enkele 1 dm. tot 1½ dm. sanderige skalie- lagies kom voor; plek-plek effens korrelrig; effens side- riethoudend; piriethoudend; skalieagtig 78 dm. van onder af; wryfvlak naby onderent	165		1,289	2	Coal, mixed; mainly dull coal; occasional 1-in. to 1½-in. sandy shale bands occur; slightly granular in parts; slightly sideritic; pyritic; shaly 78 in. from bottom; slickenside near bottom.
A	N.G.....	310		1,320	1	N.S.
	Matkool, glansend, effens piriethoudend	61		—		Coal, dull, lustrous, slightly pyritic.

Bg. 125 (verv.)

B.H. 125 (contd.)

No. van B.N.I.-monster F.R.I. sample no.	Dikte (Dm.) THICKNESS (IN.)		RU-STEENKOOL RAW COAL						WASTOETS WASHING TEST		DRYEST OF FLOAT						SINK- STOF SINK	
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	Groot- te (Dm.) Size (In.)	S.G.	Op- brengs Yield %	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	As Ash %
T 204	67	39	—	—	28.2	—	—	—	—1	1.58	58.1	12.0	3.1	13.8	35.3	47.8	1½	48.1
	58	15	—	2.7	18.0	34.5	44.8	1½	—	—	—	—	—	—	—	—	—	—
	348	56	—	2.5	31.0	24.4	42.1	P	—1	1.58	42.9	—	—	—	—	—	—	—
	—	55	—	—	24.5	—	—	—	—1	1.35	32.2	11.6	2.7	18.1	30.6	48.6	1Ag	42.3
	—	—	—	—	—	—	—	—	—	1.58	28.9	13.1	3.0	7.5	37.1	52.4	2½	—
T 205	543	45	—	2.2	40.9	24.4	32.5	P	—1	1.58*	61.1*	12.3*	2.8*	13.1*	33.7*	50.4*	—	—
	4	37	—	2.4	39.2	24.5	33.9	P	—1	1.58	10.4	—	—	—	—	—	—	—
	47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	305	74	—	—	24.4	—	—	—	—1	1.58	49.1	12.4	4.0	9.8	22.4	63.8	P	38.5
	—	94	—	3.1	30.2	22.8	43.9	P	—1	1.58	28.1	—	—	—	—	—	—	—
	—	104	—	—	21.8	—	—	—	—1	1.58	66.0	11.6	3.0	16.0	23.6	57.4	P	33.1
	—	28	—	—	19.4	—	—	—	—1	1.58	70.0	12.2	3.0	13.6	32.6	50.8	1Ag	32.9
A	125	165	—	—	28.9	—	—	—	—1	1.58	51.9	11.9	2.8	15.6	28.6	53.0	1Ag	43.3
	310	61	—	—	18.3	—	—	—	—1	1.58	87.3	12.0	2.9	15.2	23.7	58.2	P	39.9

* Bereken / Calculated.

BOORGAT 126 : KLIMOPFONTEIN 365 : BOREHOLE 126

Kern 3½ dm.

Core 3½ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sand, ou klip en sandsteen (stamp-boor)	9	6	9	6	Sand, laterite and sandstone (jump-drill).
Sandsteen (Holkranssandsteen)...	37	3	46	9	Sandstone (Cave Sandstone).
Sandsteen, erg fynkorrelrig, lig-rooi, met wit dele en heelwat kalkhoudende knolle	101	11	148	8	Sandstone, very fine-grained, light pink, with white portions and lot of calcareous nodules.
Sliksteen en erg fynkorrelrige sandsteen; ligrooi, vaalrooi, ligbruin en pers (Rooilae)	185	9	334	5	Siltstone and very fine-grained sandstone; light pink, grey pink, light brown and purple (Re-Beds).
Sandsteen, middelkorrelrig tot grintagtig met geronde en hoekige spoelklippies; ligrooi, vaalrooi, vaalgeel, geelbruin en wit; slegs drie dun rooi moddersteenlagies kom voor	60	9	—	—	Sandstone, medium-grained to gritty with rounded and angular pebbles; light pink, grey-pink, grey-yellow, yellow-brown and white; only three thin red mudstone bands occur.
Sliksteen, ligrooi, ligbruin en vaalpers; mikavlokkies in vaalpers dele	32	6	—	—	Siltstone, light pink, light brown and grey-purple; mica flakes in grey-purple parts.
Sandsteen, vaalwit tot vaalgroen, fynkorrelrig, effens mikdraend en massief (Moltenolae)	7	11	437	11	Sandstone, grey-white to grey-green, fine-grained, slightly micaceous and massive (Molteno Beds).
Moddersteen, ligvaal in onderste helfte, ligbruin, donkerbruin en plek-plek persagtig in boonste helfte; onderste 15 vt. bevat baie donkerkleurige dele	295	1	736	0	Mudstone, light grey in bottom half, light brown, dark brown and partly purplish in top half; bottom 15 ft. contains many dark-coloured portions.
Skalie en steenkool, intiem gemeng, erg piriethoudend	8	—	—	—	Shale and coal, intimately mixed very pyritic.
Kalsiet.....	9	—	—	—	Calcite.
Glanskool, skalieagtig, kalsiethoudend	4½	—	737	9½	Coal, bright, shaly, calcitic.
Glanskool, gelaag, plek-plek vitrietagtig, effens kalsiethoudend; onderste 1 dm. skalieagtig	1	9½	—	—	Coal, bright, banded, vitrainous in parts, slightly calcitic; bottom 1 in. shaly.
Skalie, donkervaal.....	5	9	—	—	Shale, dark-grey.
Glanskool, gelaag, plek-plek met skalielae; kalsiethoudend by boen onderent	1	3	—	—	Coal, bright, banded, with shale bands in parts; calcitic at top and bottom.
Skalie, swart, met 'n 14 dm. sideriethoudende steenkoolaag	8	0	—	—	Shale, black, with a 14-in. sideritic coal-band.
Skalie en steenkool, gemeng.....	4	—	—	—	Shale and coal, mixed.
Glanskool, effens, piriet- en kalsiethoudend; onderste 5 dm. skalieagtig	1	6	—	—	Coal, bright, slightly pyritic and calcitic; bottom 5 in. shaly.
Skalie.....	9	—	—	—	Shale.
Glanskool, gelaag; onderste 3 dm. skalieagtig; effens kalsiethoudend	1	4	758	6	Coal, bright, banded; bottom 3 in. shaly; slightly calcitic.
Skalie, swart, met baie skalieagtige steenkoolagies	6	9	—	—	Shale, black, with many shaly coal-bands.
Skalielae, lae van gemengde steenkool en skalie en van gelaagde glanskool om die beurt; lae is tussen 8 dm. en 10 dm. dik	12	6	—	—	Shale bands, bands of mixed coal and shale and of banded bright coal, alternating; bands are between 8 in. and 10 in. thick.
Skalie en steenkool, intiem gemeng	7	—	778	4	Shale and coal, intimately mixed

Bg: 126 (verv.)

B.H. 126 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
lanskool, gelaag, kalsiethoudend; effens skalieagtig na onder	1	4	—	—	Coal, bright, banded, calcitic; slightly shaly towards bottom.
alie, intiem gemeng met steenkool in onderste deel		7	—	—	Shale, intimately mixed with coal towards bottom.
eenkoollae, dun, en dun skalielae om die beurt	1	9	—	—	Coal bands, thin, alternating with thin shale bands.
alie, swart, intiem gemeng met steenkool in onderste helfte	1	1	—	—	Shale, black, intimately mixed with coal in bottom half.
lanskool, gelaag, erg skalieagtig; kalsiet- en piriethoudend	1	9	—	—	Coal, bright, banded, very shaly; calcitic and pyritic.
alie en steenkool.....		5	—	—	Shale and coal.
lanskool, gelaag; plek-plek skalieagtig, met 3 dm. gemengde steenkool en skalie 6 dm. van bo af, 2 dm. skalie 18 dm. van bo af en 'n 1 dm. skalieagtige lagie 26 dm. van bo af; onderste helfte bevat die beste steenkool; piriethoudend	3	9	—	—	Coal, bright, banded; shaly in parts, with 3 in. mixed coal and shale 6 in. from top, 2 in. shale 18 in. from top and a 1-in. shaly band 26 in. from top; bottom half contains the best coal; pyritic and calcitic.
alie, koolstofhoudend.....		5	—	—	Shale, carbonaceous.
lanskool, gelaag; skalieagtig in boonste helfte en glanskool in onderste helfte; kalsiethoudend	1	7	—	—	Coal, bright, banded; shaly in top half and bright in bottom half; calcitic.
alie met glanskool in middel..	1	0	—	—	Shale with bright coal in middle.
lanskool, gelaag; met 1½ dm. skalie 33 dm. van onder af en 3 dm. skalie 6 dm. van onder af; effens piriethoudend; plek-plek korrelrig (3 dm. kernverlies tussen 778 vt. 4 dm. en 798 vt. 1 dm.)	5	10	798	1	Coal, bright, banded; with 1½ in. shale 33 in. from bottom and 3 in. shale 6 in. from bottom; slightly pyritic; granular in parts (3 in. core loss between 778 ft. 4 in. and 798 ft. 1 in.).
alie, swart, met vier 2 dm. tot 6 dm. steenkoollagies	10	1	808	2	Shale, black, with four 2-in. to 6-in. coal-bands.
lanskool, gelaag; skalieagtig na onder; erg kalsiethoudend	1	2	—	—	Coal, bright, banded; shaly towards bottom; very calcitic.
alie, swart.....	2	2	—	—	Shale, black.
lanskool, gelaag; piriethoudend, met 2½ dm. skalie 20 dm. van onder af; onderste 5 dm. effens sideriethoudend	2	4	—	—	Coal, bright, banded; pyritic, with 2½ in. shale 20 in. from bottom; bottom 5 in. slightly sideritic.
alie met steenkool onder in...		10	—	—	Shale with coal towards bottom.
lanskool, gelaag; en erg skalieagtige, korrelrige steenkool; erg sideriethoudend veral in onderste helfte; piriethoudend (1 dm. kern verlies hier)	1	3	—	—	Coal, bright, banded; and very shaly, granular coal; very sideritic especially in bottom half; pyritic (1 in. core loss here).
alie, swart, met drie 2 dm. tot 9 dm. steenkoollagies in middel	9	9	—	—	Shale, black, with three 2-in. to 9-in. coal-bands in middle.
lanskool, dungelaag; sideriethoudend in onderste helfte; 1½ dm. skalie 7½ dm. van bo af en 4½ dm. skalie 17 dm. van onder af; effens piriethoudend in boonste helfte	3	1	—	—	Coal, bright, thinly banded; sideritic in bottom half; 1½ in. shale 7½ in. from top and 4½ in. shale 17 in. from bottom; slightly pyritic in top half.
alie, swart, met 6 dm. glanskool in middel	4	8	—	—	Shale, black, with 6 in. bright coal in middle.
lanskool, gelaag, met dun skalie-lagies; piriethoudend; 4 dm. skalie 9 dm. van onder af	2	3	835	9	Coal, bright, banded, with thin shale bands; pyritic and calcitic 4 in. shale 9 in. from bottom.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Skalie.....	1	2	836	11	Shale.
Glanskool, gelaag, en skalie; fyn- gelaag, piriethoudend en effens kalsiethoudend	5	2	—	—	Coal, bright, banded, and shale; laminated, pyritic and slightly calcitic.
Glanskool, gelaag, en skalie; intiem gemeng	4	3	—	—	Coal, bright, banded, and shale; intimately mixed.
Skalielae en steenkoollae om die beurt	2	0	—	—	Shale bands alternating with coal- bands.
Glanskool, gelaag, skalieagtig...	1	0	—	—	Coal, bright, banded, shaly.
Glanskool, skalieagtig, en skalie..	1	2	—	—	Coal, bright, shaly, and shale.
Glanskool, gelaag; erg skalieagtig by bo-ent	1	0	—	—	Coal, bright, banded; very shaly at top.
Skalie en steenkool.....	1	1	—	—	Shale and coal.
Skalielagies en glanskoollagies om die beurt	10	6	863	1	Shale bands alternating with bright coal-bands.
Glanskool, gelaag, met baie dun skalielagies; effens sideriethou- dend in onderste deel; 3 dm. skalie 13 dm. van bo af en 4 dm. skalie 22 dm. van onder af	3	7	—	—	Coal, bright, banded, with many thin shale bands; slightly side- ritic towards bottom; 3 in. shale 13 in. from top and 4 in. shale 22 in. from bottom.
Skalie.....		4	—	—	Shale.
Glanskool, gelaag, plek - plek korrelrig en vitrietagtig; effens sideriethoudend veral in die boonste 6 dm.; 1½ dm. skalie 4 dm. van onder af	2	2	—	—	Coal, bright, banded, granular and vitrainous in parts; slightly sideritic especially in top 6 in.; 1½ in. shale 4 in. from bottom.
Skalie met glanskool in middel..		10	—	—	Shale with bright coal in middle.
Glanskool, gelaag.....	1	0	871	0	Coal, bright, banded.
Skalie.....	1	7	872	1	Shale.
Glanskool, gelaag; plek - plek vitrietagtig; met agt 1 dm. tot 1½ dm. skalielagies eweredig gespasieer; effens piriethoudend	3	10	—	—	Coal, bright, banded; vitrainous in parts, with eight 1-in. to 1½ -in. shale bands evenly spaced; slightly pyritic.
Steenkool, erg glansend.....	1	5	—	—	Coal, very bright.
Glanskool, korrelrig, effens side- riethoudend	1	10	—	—	Coal, bright, granular, slightly sideritic.
Steenkool, erg sideriethoudend (4 dm. kernverlies tussen 872 vt. 7 dm. en 880 vt. 2 dm.)		2	880	2	Coal, very sideritic (4 in. core loss between 872 ft. 2 in. and 880 ft. 2 in.).
Skalie met vyf 1 dm. tot 6 dm. glanskoollagies; wryfvlakke naby onderent	13	6	—	—	Shale with five 1-in. to 6-in. bright coal-bands; slickensides near bottom.
Steenkool, erg sideriethoudend...		1	—	—	Coal, very sideritic.
Glanskool, gelaag, met 'n paar dun skalieagtige lagies; piriethou- dend; sideriethoudend veral in boonste helfte	2	2	895	11	Coal, bright, banded, with a few thin shaly bands; pyritic; side- ritic especially in top half.
Skalie met sewe 2 dm. tot 9 dm. skalieagtige steenkool lagies en 24 dm. gemengde steenkool en skalie 8 vt. van bo af, 'n 18 dm. soortgelyke laag 2 vt. laer af en 'n 20 dm. soortgelyke laag 10 dm. van onder af; al drie is sideriethoudend	26	6	—	—	Shale, with seven 2-in. to 9-in. shaly coal-bands and 24 in. mixed coal and shale 8 ft. from top, a 18 in. similar band 2 ft. lower down and a 20-in. similar band 10 in. from bottom; all three sideritic.
Skalie, donkervaal, effens kalk- houdend, hard	2	3	—	—	Shale, dark grey, slightly calca- reous, hard.
Skalie, swart, met kwartskorrels..	6	6	931	3	Shale, black, with quartz grains.

Bg. 126 (verv.)

B.H. 126 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sandsteen, swart, met groot kwartskorrels en spoelklippies tot $\frac{1}{2}$ dm. in deursnee	4	8	—	—	Sandstone, black, with large quartz grains and pebbles up to $\frac{1}{2}$ in. in diameter.
Moddersteen, bruin, met talryke wryfvlakke		2	—	—	Mudstone, brown with numerous slickensides.
Skalie.....	1	3	—	—	Shale.
Sandsteen, swart, met groot kwartskorrels en spoelklippies tot $\frac{1}{2}$ dm. in deursnee; plek-plek kalkhoudend	14	3	951	8	Sandstone, black, with large quartz grains and pebbles up to $\frac{1}{2}$ in. in diameter, contains calcareous portions.
Skalie, koolstofhoudend, plek-plek steenkoolagtig	6	0	—	—	Shale, carbonaceous, coaly in places.
Skalie, vaalswart, fossielhoudend.	2	8	—	—	Shale, grey-black, fossiliferous.
Skalie, koolstofhoudend, en skalieagtige steenkool	2	9	—	—	Shale, carbonaceous, and shaly coal.
Sandsteen, swart.....		10	—	—	Sandstone, black.
Skalie, swart.....	1	10	—	—	Shale, black.
Sandsteen.....		7	—	—	Sandstone.
Skalie en skalieagtige steenkool..	3	0	969	4	Shale and shaly coal.
Sandsteen, vuilvaal, grofkorrelrig	2	0	—	—	Sandstone, dirty grey, coarse-grained.
Moddersteen, bruin, sanderig....	1	2	—	—	Mudstone, brown, sandy.
Sandsteen, grofkorrelrig, vuilvaal en swart	2	1	—	—	Sandstone, coarse-grained, dirty grey and black.
Moddersteen, vaalbruin.....		8	—	—	Mudstone, grey-brown.
Sandsteen, middel- tot grofkorrelrig; boonste deel skalieagtig; wit	4	1	—	—	Sandstone, medium- to coarse-grained; top portion shaly; white.
Moddersteen, ligbruin.....	6	9	—	—	Mudstone, light brown.
Sandsteen, vuilvaal en swart; en sanderige skalie, breë lae om die beurt	13	0	—	—	Sandstone, dirty grey and black; and sandy shale; broad bands alternating.
Skalie, hoofsaaklik bruinswart; verspreide kwartskorrels in onderste deel	6	4	—	—	Shale, mainly brown, black; scattered quartz grains towards bottom.
Sandsteen, hoofsaaklik middelkorrelrig; wit	11	3	—	—	Sandstone, mainly medium-grained; white.
Skalie, effens sanderig.....	3	1	—	—	Shale, slightly sandy.
Sandsteen, middel- tot fynkorrelrig	3	9	—	—	Sandstone, medium- to fine-grained.
Skalie, sanderig; boonste deel swart en steenkoolagtig in onderste deel	4	9	—	—	Shale, sandy; black towards top and coaly towards bottom.
Steenkool, skalieagtig.....		4	—	—	Coal, shaly.
Skalie.....	1	8	—	—	Shale.
Sandsteen, fyn- tot grofkorrelrig, vaal; en sanderige skalie; afwisselende lae	11	6	1,041	9	Sandstone, fine- to coarse-grained, grey; and sandy shale; alternating bands.
Skalie, vaalswart, fossielhoudend.		8	—	—	Shale, grey-black, fossiliferous.
Skalie, swart, koolstofhoudend, met 'n bietjie steenkoolagtige skalie en matkool	17	0	—	—	Shale, black, carbonaceous with a little coaly shale and dull coal.
Sandsteen, middelkorrelrig; skalieagtig na onder	1	4	—	—	Sandstone, medium-grained; shaly towards bottom.
Skalie, swart; en koolstofhoudende skalie	9	0	—	—	Shale, black; and carbonaceous shale.
Skalie, steenkoolagtig.....		10	1,070	7	Shale, coaly.
Matkool, glansend, homogeen; twee groot pirietknolle	3	9	—	—	Coal, dull, lustrous, homogeneous; two large pyritic nodules.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Matkool, swaar, korrelrig.....	1	4	—	—	Coal, dull, heavy, granular.
Matkool, plek - plek glansend, homogeen; met glanskoolstre- pies in onderste helfte	3	7	—	—	Coal, dull, lustrous in parts, homogeneous; with bright coal- streaks in bottom half.
Steenkool, korrelrig, sideriethou- dend, skaliegagtig		7	—	—	Coal, granular, sideritic, shaly.
Matkool, erg glansend, sideriet- en piriethoudend; glanskool in onderste 7 dm.	1	10	—	—	Coal, dull, very lustrous, sideritic and pyritic; bright coal in bottom 7 in.
Skalie, sideriethoudend (7 dm. kernverlies tussen 1,070 vt. 7 dm. en 1,082 vt. 10 dm.)		7	1,082	10	Shale, sideritic (7 in. core loss between 1,070 ft. 7 in. and 1,082 ft. 10 in.).
Skalie, swart; sanderig in onderste deel	2	3	—	—	Shale, black; sandy towards bot- tom.
Sandsteen, wit, vuilvaal, fyn- tot grofkorrelrig, met dun, vaal tot swart, mikahoudende lagies	20	5	—	—	Sandstone, white, dirty grey, fine- to coarse-grained with thin grey to black micaceous bands.
Sandsteen, wit, grofkorrelrig, mas- sief, veldspaties	4	4	1,109	10	Sandstone, white, coarse-grained, massive, feldspathic.
Matkool met 10 dm. erg dowwe steen 15 dm. van bo af en enkele dunner erg dowwe lagies; onderste 17 dm. is gelaagde glanskool met 'n $\frac{1}{2}$ dm. piriet- lagie in middel; enkele ver- spreide siderietknolle in onder- ste 7 dm.	5	8	1,115	6	Coal, dull, with 10 in. very dull coal 15 in. from top and occa- sional thinner very dull bands; bottom 17 in. is banded bright coal with a $\frac{1}{2}$ -in. pyrite band in middle; some scattered siderite nodules in bottom 7 in.
Sandsteen, fynkorrelrig, gelaag, vuilvaal, vaalbruin mikahou- dend	6	3	1,121	9	Sandstone, fine-grained, lamina- ted, dirty grey, grey-brown micaceous.

BOORGAT 126 : KLIMOPFONTEIN 365 : BOREHOLE 126

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth	Nature of strata	
		<i>Dm.</i> <i>In.</i>	<i>Vt.</i> <i>Ft.</i> <i>Dm.</i> <i>In.</i>		
206	N.G.....	4½	737	9½	N.S.
C	Glanskool, gelaag; plek-plek vitrietagtig, effens kalsiethoudend; onderste 1 dm. skalieagtig	21½	—	—	Coal, bright, banded; vitrainous in parts, slightly calcitic; bottom 1 in. shaly.
	N.G.....	184	—	—	N.S.
B	Glanskool, effens piriethoudend; onderste 5 dm. skalieagtig	18	—	—	Coal, bright, slightly pyritic and calcitic; bottom 5 in. shaly.
	N.G.....	9	—	—	N.S.
A	Glanskool, gelaag; onderste 3 dm. skalieagtig; effens kalsiethoudend	16	758	6	Coal, bright, banded; bottom 3 in. shaly; slightly calcitic.
207	N.G.....	7	778	4	N.S.
F	Glanskool, gelaag, kalsiethoudend; effens skalieagtig na onder	16	—	—	Coal, bright, banded, calcitic; slightly shaly towards bottom.
	N.G.....	7	—	—	N.S.
E	Steenkool, dun, en dun kalielae om die beurt	21	—	—	Coal-bands, thin, alternating with thin shale bands.
	N.G.....	13	—	—	N.S.
D	Glanskool, gelaag, erg skalieagtig, kalsiet- en piriethoudend	21	—	—	Coal, bright, banded, very shaly; calcitic and pyritic.
	N.G.....	5	—	—	N.S.
C	Glanskool, gelaag, plek-plek skalieagtig, met 3 dm. gemengde steenkool en skalie 6 dm. van bo af, 2 dm. skalie 18 dm. van bo af en 'n 1 dm. skalieagtige lagie 26 dm. van bo af; onderste helfte bevat die beste steenkool; piriethoudend	45	—	—	Coal, bright, banded; shaly in parts, with 3 in. mixed coal and shale 6 in. from top, 2 in. shale 18 in. from top and a 1-in. shaly band 26 in. from top, bottom half contains the best coal; pyritic and calcitic.
	N.G.....	5	—	—	N.S.
B	Glanskool, gelaag; skalieagtig in boonste helfte en giansend in onderste helfte; kalsiethoudend	19	—	—	Coal, bright, banded; shaly in top half and bright in bottom half; calcitic.
	N.G.....	12	—	—	N.S.
A	Glanskool, gelaag; 1½ dm. skalie 33 dm. van onder af en 3 dm. skalie 6 dm. van onder af; effens piriethoudend; plek-plek korrelrig (3 dm. kernverlies tussen 778 vt. 4 dm. en 798 vt. 1 dm.)	70	798	1	Coal, bright, banded, 1½ in. shale 33 in. from bottom and 3 in. shale 6 in. from bottom; slightly pyritic; granular in parts (3 in. core loss between 778 ft. 4 in. and 798 ft. 1 in.).
208	N.G.....	121	808	2	N.S.
E	Glanskool, gelaag; skalieagtig na onder; erg kalsiethoudend	14	—	—	Coal, bright, banded; shaly towards bottom; very calcitic.
	N.G.....	26	—	—	N.S.

Bg. 126 (verv.)

B.H. 126 (contd.)

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth	Nature of strata
D	Glanskool, gelaag, piriethou- dend, 2½ dm. skalie 20 dm. van onder af; onderste 5 dm. effens sideriethoudend	Dm. In. 28	Vt. Ft. —	Coal, bright, banded, pyritic; 2½ in. shale 20 in. from bottom; bottom 5 in. slightly sideritic.
C	N.G..... Glanskool, gelaag; en erg skaliegagtige steenkool; erg sideriethoudend in onderste helfte; piriethoudend (1 dm. kernverlies hier)	10 15	— —	N.S. Coal, bright, banded; and very shaly coal; very sideritic; especially in bottom half; pyritic (1 in. core loss here).
B	N.G..... Glanskool, dungelaag; side- riethoudend in onderste helfte; 1½ dm. skalie 7½ dm. van bo af; 4½ dm. skalie 17 dm. van onder af uit- gesluit; effens piriethou- dend in boonste helfte	117 37	— —	N.S. Coal, bright, thinly banded; sideritic in bottom half; 1½ in. shale 7½ in. from top; 4½ in. shale 17 in. from bottom excluded; slightly pyritic in top half.
A	N.G..... Glanskool, gelaag; met dun skalielagies; piriethou- en kal- siethoudend; met 4 dm. skalie 9 dm. van onder af uitgesluit	57 27	— 835 9	N.S. Coal, bright, banded; with thin shale bands; pyritic and calcitic; with 4 in. shale 9 in. from bottom excluded.
T 209	N.G.....	14	836 11	N.S.
D	Glanskool, gelaag; en skalie; fyngelaag, piriethoudend en effens kalsiethoudend	62	—	Coal, bright, banded, and shale; finely banded, pyritic and slightly calcitic.
C	N.G..... Glanskool, gelaag; met baie dun skalielagies; effens side- riethoudend in onderste deel; 3 dm. skalie 13 dm. van bo af; 4 dm. skalie 22 dm. van onder af uitgesluit	252 43	863 1	N.S. Coal, bright, banded; with many thin shale bands; slightly sideritic towards bot- tom; 3 in. shale 13 in. from top; 4 in. shale 22 in. from bottom excluded.
B	N.G..... Glanskool, gelaag, plek-plek korrelrig en vitrietagtig; effens sideriethoudend veral in die boonste 6 dm.; 1½ dm. skalie 4 dm. van onder af	4 26	— —	N.S. Coal, bright, banded, granular and vitrainous in parts; slightly sideritic especially in top 6 in.; 1½ in. shale 4 in. from bottom.
A	N.G..... Glanskool, gelaag.....	10 12	— 871 0	N.S. Coal, bright, banded.
T 210	N.G.....	19	872 7	N.S.
H	Glanskool, gelaag; plek-plek vitrietagtig; agt 1 dm. tot 1½ dm. skalielagies eweredig gespasieer; effens piriethou- dend	46	—	Coal, bright, banded, vitrai- nous in parts; eight 1-in. to 1½-in. shale bands evenly spaced; slightly pyritic.
G	Steenkool, erg glansend.....	17	—	Coal, very bright.
F	Glanskool, korrelrig, effens sideriethoudend	22	—	Coal, bright, granular, slightly sideritic.
	N.G.....	165	—	N.S.

Bg. 126 (verv.)

B.H. 126 (contd.)

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth	Nature of strata
E	Glanskool , gelaag, met 'n paar dun skalieagtige lagies; piriethoudend; sideriethou- dend veral in boonste helfte	<i>Dm.</i> <i>In.</i> 26	<i>Vt.</i> <i>Fl.</i> 895 <i>Dm.</i> <i>In.</i> 11	Coal , bright, banded, with a few thin shaly bands; pyritic; sideritic especially in top half.
D	N.G..... Matkool , glansend, homo- geen; twee groot piriet- knolle	2,094 45	1,070 7 —	N.S. Coal , dull, lustrous, homoge- neous; two large pyritic nodules.
C	Matkool , swaar, korrelrig...	16	—	Coal , dull, heavy, granular.
B	Matkool , plek-plek glansend; homogeen, met glanskool- strepies in onderste helfte	43	—	Coal , dull, lustrous in parts, homogeneous, with bright coal-streaks in bottom half.
A	N.G..... Matkool , erg glansend; side- riet- en piriethoudend; glanskool in onderste 7 dm.	7 22	— —	N.S. Coal , dull, very lustrous; sideritic and pyritic; bright coal in bottom 7 in.
	N.G.....	7	1,082 10	N.S.
F 211	N.G.....	52	1,109 10	N.S.
A	Matkool met 10 dm. erg dowwe steenkool 15 dm. van bo af en enkele dunner erg dowwe lagies; onderste 17 dm. is gelaagde glans- kool met 'n ½ dm. piriet- lagie in middel; enkele ver- spreide siderietknolle in onderste 7 dm.	68	1,115 6	Coal , dull, with 10 in. very dull coal 15 in. from top and occasional thinner, very dull bands; bottom 17 in. is banded bright coal with a ½-in. pyritic band in middle; some scattered siderite no- dules in bottom 7 in.

BOORGAT 127 : DE END 424 : BOREHOLE 127

Kern 3½ dm.

Core 3½ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sand.....	12	0	—	—	Sand.
Sandsteen, wit en vaalwit, plek- plek met 'n ligrooi kleur (Hol- kranssandsteen)	151	8	163	8	Sandstone, white and grey-white with a light pink tint in places (Cave Sandstone).
Sandsteen en sliktsteen, ligbruin, plek-plek met wit dele en ver- spreide kalkhoudende knolle (Rooilae)	292	8	456	4	Sandstone and siltstone, light brown, with white portions in places and scattered calcareous nodules (Red Beds).
Sandsteen en grintsteen, plek-plek met hoekige tot geronde spoel- klippe tot 1 dm. in deursnee ; vaalbruin, bruin, witagtig ; met vier dun moddersteenlagies ; bevat kalkhoudende knolle by bo-ent (Moltenolae)	76	6	—	—	Sandstone and grit, with angular to rounded pebbles up to 1 in. in diameter; grey brown, brown whitish; with four thin mud- stone bands; contains calca- reous nodules at top (Molten- Beds).
Moddersteen, ligbruin.....	18	8	—	—	Mudstone, light brown.
Sandsteen, fyngelaag, mikahou- dend, vaalpers	4	5	—	—	Sandstone, finely banded, mica- ceous, grey purple.
Moddersteen, vaal en vaalpers, sanderig	1	3	—	—	Mudstone, grey and grey purple sandy.
Sandsteen, fynkorrelrig.....		6	557	8	Sandstone, fine-grained.
Moddersteen, persagtig.....	5	4	—	—	Mudstone, purplish.
Moddersteen, ligbruin en ligpers, plek-plek met witvaal dele	94	0	657	0	Mudstone, light brown and light purple with grey parts in places
Moddersteen, ligvaal; onderste 12 vt. vaalswart	234	3	891	3	Mudstone, light grey; bottom 12 ft. grey black.
Skalie, koolstofhoudend.....		1	891	4	Shale, carbonaceous.
Glanskool, gelaag.....	1	8	—	—	Coal, bright, banded.
Skalie, koolstofhoudend.....		7	—	—	Shale, carbonaceous.
Glanskool, gelaag, intiem gemeng met skalie in onderste deel	1	5	—	—	Coal, bright, banded, intimately mixed with shale towards bot- tom.
Glanskool, gelaag; met ¾ dm. skalie 9 dm. van onder af	2	7	—	—	Coal, bright, banded; with ¾ in. shale 9 in. from bottom.
Skalie, swart en vaal, met vier 5 dm. steenkoollagies	21	3	—	—	Shale, black and grey; with four 5-in. coal-bands.
Glanskool, gelaag; met skalielagies en pirietknolle	1	2	920	0	Coal, bright, banded; with shale bands and pyrite nodules.
Skalie met heelwat skalieagtige steenkoollagies	14	8	934	8	Shale with several shaly coal bands.
Skalie; glanskool en intiem ge- mengde skalie en steenkool; breë lae om die beurt	15	10	950	6	Shale; bright coal and intimately mixed shale and coal; alterna- ting broad bands.
Glanskool, gelaag; met dun skalie- agtige lagies in onderste 3 dm.	2	8	—	—	Coal, bright, banded; with thin shaly bands in bottom 3 in.
Skalie, koolstofhoudend; met 6 dm. glanskool in middel	1	6	—	—	Shale, carbonaceous; with 6 in. bright coal in middle.
Glanskool, gelaag; met 3 dm. skalie 19 dm. van bo af, 6 dm. skalieagtige steenkool by bo-ent en 4 dm. skalieagtige steenkool 10 dm. van onder af; kalsiet- houdend	3	10	—	—	Coal, bright, banded; with 3 in. shale 19 in. from top, 6 in. shaly coal at top and 4 in. shaly coal 10 in. from bottom calcitic.
Skalie, koolstofhoudend.....		5	—	—	Shale, carbonaceous.
Glanskool, gelaag; met 4 dm. skalie 23 dm. van bo af; baie kalsiet- vlokkes kom voor	3	9	962	8	Coal, bright, banded; with 4 in. shale 23 in. from top; many calcite flakes occur.

Bg. 127 (verv.)

B.H. 127 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Skalie, swart; met glanskool en skalie by onderent	7	9	970	5	Shale, black; with bright coal and shale at bottom.
Glanskool, gelaag; met dun koolstofhoudende skalielagies; effens piriethoudend	3	8	—	—	Coal, bright, banded; with thin carbonaceous shale bands; slightly pyritic.
Skalie, koolstofhoudend.....	1	5	—	—	Shale, carbonaceous.
Glanskool, gelaag, korrelrig; met dun skaliëagtige lagies en ½ dm. moddersteen 18 dm. van bo af	2	10	—	—	Coal, bright, banded, granular; with thin shaly bands and ½ in. mudstone 18 in. from top.
Skalie, swart, met heelwat steenkoollagies in onderste 3 vt.	8	0	—	—	Shale, black; with numerous coal-bands in bottom 3 ft.
Glanskool, gelaag; met baie dun skaliëagtige lagies en 'n 3 dm. siderietlaag 11 dm. van onder af	4	6	—	—	Coal, bright, banded; with many thin shaly bands and a 5-in. siderite band 11 in. from bottom.
Skalie en steenkool, gemeng.....	1	1	—	—	Shale and coal, mixed.
Skalie met dun steenkoollagies...	3	11	—	—	Shale, with thin coal-bands.
Glanskool met baie dun skalielagies	1	10	997	8	Coal, bright, with many thin shale bands.
Skalie met twintig 2 dm. tot 9 dm. steenkoollagies	18	11	—	—	Shale with twenty 2-in. to 9-in. coal-bands.
Glanskool met baie dun skalielagies	1	5	—	—	Coal, bright, with many thin shale bands.
Skalie met vyf-en-twintig 2 dm. tot 10 dm. steenkool- en skaliëagtige steenkoollagies; slegs enkele lagies is sideriethoudend	28	11	1,046	11	Shale with twenty-five 2-in. to 10-in. coal-bands and shaly coal-bands; only a few bands are sideritic.
Glanskool, gelaag; met 'n 4 dm. sideriet- en piriethoudende laag 16 dm. van bo af, 1 dm. skalie 9 dm. van onder af; piriët- en kalsiethoudend in boonste 14 dm.	2	8	—	—	Coal, bright, banded; with a 4-in. sideritic and pyritic band 16 in. from top, 1 in. shale 9 in. from bottom; pyritic and calcitic in top 14 in.
Skaliëlae, dun, en dun steenkool-lae om die beurt	2	0	—	—	Shale bands, thin, and thin coal-bands, alternating.
Skalie, swart.....	5	9	—	—	Shale, black.
Glanskool met wryfvlakke.....	1	3	—	—	Coal, bright, with slickensides.
Skalie, swart; met dertien 2 dm. tot 9 dm. steenkoollagies; plek-plek koolstofhoudend en steenkoolagtig; verbrokkel deur wryfvlakke in onderste 4 vt.	33	0	1,091	7	Shale, black; with thirteen 2-in. to 9-in. coal-bands; carbonaceous and coaly in parts; crumbled by slickensides in bottom 4 ft.
Matkoollae, glanskoollae en skaliëlae om die beurt, plek-plek piriethoudend	7	3	—	—	Coal-bands, dull; bright coal-bands and shale bands, alternating; pyritic in parts.
Skalie, koolstofhoudend.....	1	3	—	—	Shale, carbonaceous.
Matkoollae, glanskoollae en koolstofhoudende skaliëlae om die beurt; piriethoudend	3	0	—	—	Coal-bands, dull; bright coal-bands and carbonaceous shale bands, alternating; pyritic.
Skalie, koolstofhoudend, en steenkoolagtige skalie	17	5	—	—	Shale, carbonaceous, and coaly shale.
Steenkool, hoofsaaklik swaar matkool; met 10 dm. koolstofhoudende skalie 22 dm. van bo af; baie groot piriëtknolle	5	3	1,125	9	Coal, mainly dull, heavy; with 10 in. carbonaceous shale 22 in. from top; many large pyrite nodules.
Skalie, swart, en koolstofhoudende skalie; enkele steenkoolagtige dele; wryfvlakke by onderent	22	7	1,148	4	Shale, black, and carbonaceous shale; occasional coaly parts; slickensides near bottom.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Matkool , homogeen; onderste 3 dm. effens minderwaardig	3	3	—	—	Coal, dull, homogeneous; bottom 3 in. slightly inferior.
Matkool , homogeen; effens piriethoudend en bevat enkele glanskoolstrepies in onderste 12 dm.	6	3	—	—	Coal, dull, homogeneous; slightly pyritic and contains occasional bright coal-streaks in bottom 12 in.
Matkool , boonste 2 dm. minderwaardig en 1 dm. skalie 13 dm. van onder af	2	10	—	—	Coal, dull; top 2 in. inferior and 1 in. shale 13 in. from bottom.
Skalie , koolstofhoudend, met enkele glanskoolaartjies		9	—	—	Shale, carbonaceous, with occasional bright coal-stringers.
Matkool met enkele dun glanskoolstrepies; plek-plek piriethoudend en korrelrig	5	2	—	—	Coal, dull, with occasional thin bright coal-streaks; pyritic and granular in parts.
Steenkool , gemeng, hoofsaaklik matkool; met 2 dm. swaar steenkool 6 dm. van bo af; wryfvlak naby onderent	4	0	—	—	Coal, mixed, mainly dull coal; with 2 in. heavy coal 6 in. from top; slickenside near bottom.
Glanskool , gelaag; met $\frac{1}{2}$ dm. skalie 14 dm. van bo af en wryfvlakke by onderent	2	8	1,173	3	Coal, bright, banded; with $\frac{1}{2}$ in. shale 14 in. from top and slickensides at bottom.
Sandsteen , fynkorrelrig, swart, vuilvaal, wit, mikahoudend, fyn-gelaag	11	6	1,184	9	Sandstone, fine-grained, black, dirty grey, white, micaceous, laminated.
Matkool met enkele glanskoolstrepies; $\frac{3}{4}$ dm. skalie 10 dm. van onder af	2	11	—	—	Coal, dull, with occasional bright coal-streaks, $\frac{3}{4}$ in. shale 10 in. from bottom.
Matkool , swaar; skalieagtige steenkool en koolstofhoudende skalie	3	1	—	—	Coal, dull and heavy; shaly coal and carbonaceous shale.
Matkool , swaar, glanskool en koolstofhoudende skalielae om die beurt; erg piriethoudend	2	10	—	—	Coal, dull, heavy, bright coal and carbonaceous shale bands, alternating; very pyritic.
Matkool met $\frac{3}{4}$ dm. minderwaardige steenkool naby bo-ent	1	6	—	—	Coal, dull, with $\frac{3}{4}$ in. inferior coal near top.
Matkoollae en glanskoollae met groot piriethnolle; $\frac{3}{4}$ dm. skalie 10 dm. van bo af en 3 dm. gemengde steenkool en skalie 8 dm. van onder af	2	5	—	—	Coal, dull and bright bands with large pyrite nodules; 3 in. shale 10 in. from top and 3 in. mixed coal and shale 8 in. from bottom.
Matkoollae , breed; breë lae van gemengde steenkool en breë lae van skalieagtige steenkool om die beurt; $\frac{3}{4}$ dm. skalie 19 dm., en 1 dm. skalie 10 dm. van onder af	3	6	1,201	0	Coal, dull, broad bands; broad bands of mixed coal and broad bands of shaly coal, alternating; $\frac{3}{4}$ in. shale 19 in., and 1 in. shale 10 in. from bottom.
Skalie , steenkoolagtig.....		6	—	—	Shale, coaly.
Sandsteen , fynkorrelrig, plek-plek grintagtig, vuilwit tot swart	8	1	—	—	Sandstone, fine-grained, gritty in parts, dirty white to black.
Skalie , swart, plek-plek steenkoolagtig	2	11	—	—	Shale, black, coal in parts.
Sandsteen , middel- tot grofkorrelrig, veldspaties, vaal tot wit lae en gelaagde, vaalswart, fynkorrelrige lae om die beurt	11	1	—	—	Sandstone, medium- to coarse-grained, feldspathic, grey to white bands alternating with laminated, grey - black, fine-grained bands.
Sandsteen , fynkorrelrig, kruisgelaag, vuilvaal tot swart	8	3	—	—	Sandstone, fine - grained, cross-bedded, dirty grey to black.
Sandsteen , middel- tot grofkorrelrig, vaal	1	11	1,233	9	Sandstone, medium- to coarse-grained, grey.

Bg. 127 (verv.)

B.H. 127 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	<i>Vt.</i> <i>Ft.</i>	<i>Dm.</i> <i>In.</i>	<i>Vt.</i> <i>Ft.</i>	<i>Dm.</i> <i>In.</i>	
Steenkool, gemeng; hoofsaaklik matkool	3	5	1,237	2	Coal, mixed; mainly dull coal.
Skalie.....	3	2	—	—	Shale.
Sandsteenlae en skalielae om die beurt	37	0	1,277	4	Sandstone bands alternating with shale bands.

BOORGAT 127 : DE END 424 : BOREHOLE 127

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
		<i>Dm.</i> <i>In.</i>	<i>Vt.</i> <i>Ft.</i>	<i>Dm.</i> <i>In.</i>		
T 416	N.G.....	1	891	4	N.S.	
E	Glanskool, gelaag.....	20	—	—	Coal, bright, banded.	
	N.G.....	24	—	—	N.S.	
D	Glanskool, gelaag; met $\frac{3}{4}$ dm. skalie 9 dm. van onder af	31	—	—	Coal, bright, banded, with $\frac{3}{4}$ in. shale 9 in. from bottom.	
	N.G.....	269	920	0	N.S.	
	N.G.....	366	—	—	N.S.	
C	Glanskool, gelaag; met dun skalieagtige lagies in onderste 3 dm.	32	—	—	Coal, bright, banded; with thin shaly bands in bottom 3 in.	
	N.G.....	18	—	—	N.S.	
B	Glanskool, gelaag; met 3 dm. skalie 19 dm. van bo af uitgesluit; 6 dm. skalieagtige steenkool by bo-ent en 4 dm. skalieagtige steenkool 10 dm. van onder af; kalsiethoudend	46	—	—	Coal, bright, banded, with 3 in. shale 19 in. from top excluded; 6 in. shaly coal at top and 4 in. shaly coal 10 in. from bottom; calcitic.	
	N.G.....	5	—	—	N.S.	
A	Glanskool, gelaag; met 4 dm. skalie 23 dm. van bo af uitgesluit; baie kalsietvlokkies	45	926	8	Coal, bright, banded; with 4 in. shale 23 in. from top excluded; many calcite flakes	
T 417	N.G.....	93	970	5	N.S.	
D	Glanskool, gelaag; met dun koolstofhoudende skalielagies; effens piriethoudend	44	—	—	Coal, bright, banded; with thin carbonaceous shale bands; slightly pyritic.	
	N.G.....	17	—	—	N.S.	
C	Glanskool, gelaag, korrelrig; met dun skalieagtige lagies en $\frac{1}{2}$ dm. moddersteen 18 dm. van bo af	34	—	—	Coal, bright, banded, granular; with thin shaly bands and $\frac{1}{2}$ in. mudstone 18 in. from top.	
	N.G.....	96	—	—	N.S.	

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth	Nature of strata
		<i>Dm. In.</i>	<i>Vt. Ft.</i> <i>Dm. In.</i>	
B	Glanskool, gelaag; met baie dun skalieagtige lagies en 'n 3 dm. siderietlaag 11 dm. van onder af	54	—	Coal, bright, banded; with many thin shaly bands and a 3-in. siderite band 11 in. from bottom.
A	N.G. Glanskool, met baie dun skalielagies	60 22	— 997 8	N.S. Coal, bright; with many thin shale bands.
T 418	N.G.	347	1,046 11	N.S.
D	Glanskool, gelaag, met 'n 4 dm. sideriet- en piriethoudende laag 16 dm. van bo af; 1 dm. skalie 9 dm. van onder af; piriët- en kalsiet-houdend in boonste 14 dm.	32	—	Coal, bright, banded; with a 4-in. sideritic and pyritic band 16 in. from top; 1 in. shale 9 in. from bottom; pyritic and calcitic in top 14 in.
C	N.G. Matkoolae, glanskoolae en skalielae om die beurt; plek-plek piriethoudend	504 87	1,091 7	N.S. Coal-bands, dull; bright coal-bands and shale bands alternating; pyritic in parts.
B	N.G. Matkoolae, glanskoolae en koolstofhoudende skalielae om die beurt; piriethoudend	15 36	—	N.S. Coal-bands, dull; bright coal-bands and carbonaceous shale bands alternating; pyritic.
A	N.G. Steenkool, hoofsaaklik swaar matkool; met 10 dm. koolstofhoudende skalie 22 dm. van bo af uitgesluit; baie groot piriëtknolle	209 63	— 1,125 9	N.S. Coal, mainly heavy dull coal; with 10 in. carbonaceous shale 22 in. from top excluded; many large pyritic nodules.
T 419	N.G.	271	1,148 4	N.S.
F	Matkool, homogeen; onderste 3 dm. effens minderwaardig	39	—	Coal, dull, homogeneous, bottom 3 in. slightly inferior.
E	Matkool, homogeen, effens piriethoudend, bevat enkele glanskoolstrepies in onderste 12 dm.	75	—	Coal, dull, homogenous, slightly pyritic, contains occasional bright coal-streaks in bottom 12 in.
D	Matkool; boonste 2 dm. minderwaardig en 1 dm. skalie 13 dm. van onder af	34	—	Coal, dull; top 2 in. inferior and 1 in. shale 13 in. from bottom.
C	N.G. Matkool met enkele dun glanskoolstrepies; plek-plek piriethoudend en korrelrig	9 62	—	N.S. Coal, dull, with occasional thin bright coal-streaks; pyritic and granular in parts.
B	Steenkool, gemeng, hoofsaaklik matkool; met 2 dm. swaar steenkool 6 dm. van bo af; wryfvlak naby onderent	48	—	Coal, mixed, mainly dull coal; with 2 in. heavy coal 6 in. from top; slickenside near bottom.
A	Glanskool, gelaag; met ½ dm. skalie 14 dm. van bo af en wryfvlakke by onderent	32	1,173 3	Coal, bright, banded; with ½ in. shale 14 in. from top and slickensides at bottom.
T 420	N.G.	138	1,184 9	N.S.
G	Matkool met enkele glanskoolstrepies; ¾ dm. skalie 10 dm. van onder af	35	—	Coal, dull, with occasional bright coal-streaks; ¾ in. shale 10 in. from bottom.

Bg. 127 (verv.)

B.H. 127 (contd.)

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth	Nature of strata
		<i>Dm. In.</i>	<i>Vt. Ft.</i> <i>Dm. In.</i>	
F	Matkool, swaar; skalieagtige steenkool en koolstofhoudende skalie	37	—	Coal, dull, heavy; shaly coal and carbonaceous shale.
E	Matkool, swaar; glanskool en koolstofhoudende skalielae om die beurt; erg piriet-houdend	34	—	Coal, dull, heavy; bright coal and carbonaceous shale bands alternating; very pyritic.
D	Matkool met $\frac{3}{4}$ dm. minderwaardige steenkool naby bo-ent	18	—	Coal, dull, with $\frac{3}{4}$ in. inferior coal near top.
C	Matkoollae en glanskoollae met groot pirietknolle; $\frac{3}{4}$ dm. skalie 10 dm. van bo af en 3 dm. gemengde steenkool en skalie 8 dm. van onder af	29	—	Coal, dull and bright bands with large pyrite nodules; $\frac{3}{4}$ in. shale 10 in. from top and 3 in. mixed coal and shale 8 in. from bottom.
B	Matkoollae, breed, breë lae van gemengde steenkool en breë lae van skalieagtige steenkool om die beurt; $\frac{3}{4}$ dm. skalie 19 dm. en 1 dm. skalie 10 dm. van onder af	42	1,201 0	Coal, dull, broad bands; broad bands of mixed coal and broad bands of shaly coal alternating; $\frac{3}{4}$ in. shale 19 in., and 1 in. shale 10 in. from bottom.
	N.G.....	393	1,233 9	N.S.
A	Steenkool, gemeng; hoofsaaklik matkool	41	1,237 2	Coal, mixed; mainly dull coal.

Bg. 127 (verv.)

B.H. 127 (contd.)

No. van B.N.I.-monster F.R.I. sample no.	DIKTE (DM.) THICKNESS (IN.)		RU-STEENKOOL RAW COAL								WASTOETS WASHING TEST		DRYFSTOF FLOAT						SINK- STOF SINK	
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	Groot- te (Dm.) Size (in.)	S.G.	Op- brengs Yield %	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	As Ash %		
T 419	—	39	—	—	24.7	—	—	—	—1	1.58	50.9	11.3	2.9	15.8	19.0	62.3	F	33.9		
	—	75	—	—	15.7	—	—	—	—1	1.58	86.1	12.2	2.9	12.1	20.8	64.2	P	38.2		
	—	34	—	—	28.8	—	—	—	—1	1.58	50.7	11.2	2.6	17.7	20.8	58.9	F	40.2		
	9	62	—	—	23.9	—	—	—	—1	1.58	61.2	11.2	2.6	17.7	21.1	58.6	F	33.8		
T 420	—	48	—	—	22.5	—	—	—	—1	1.58	65.7	11.9	2.4	14.7	23.9	59.0	F	37.4		
	—	32	—	—	17.3	—	—	—	—1	1.58	77.6	13.0	2.5	9.0	30.9	57.6	1Ag	46.0		
	138	35	11.2	2.6	21.0	20.4	56.0	F	—1	1.58	70.2	—	—	—	—	—	—	—		
	—	37	—	2.1	45.8	15.3	36.8	F	—1	1.58	2.4	—	—	—	—	—	—	—		
	—	34	—	1.7	45.0	19.8	33.5	F	—1	1.58	17.5	—	—	—	—	—	—	—		
	—	18	—	—	20.9	—	—	—	—1	1.58	85.4	11.5	2.4	18.0	19.8	59.8	F	38.2		
	—	29	—	—	23.1	—	—	—	—1	1.58	63.5	12.4	2.4	12.8	25.6	59.2	1Ag	40.9		
A	393	42	—	—	22.6	—	—	—	—1	1.58	64.0	12.3	2.4	13.3	24.2	60.1	F	39.0		
	—	41	—	—	11.1	—	—	—	—1	1.58	94.8	13.1	2.3	9.2	27.8	60.7	1Ag	45.5		

BOORGAT 128 : KALKVLAKTE 263 : BOREHOLE 128

Kern 3½ dm.

Core 3½ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sand.....	64	6	—	—	Sand.
Sandsteen, wit, erg fynkorrelrig (Holkranssandsteen)	210	11	275	5	Sandstone, white, very fine-grained (Cave Sandstone).
Sandsteen en sliktsteen, ligrooi en sjokoladebruin, plek-plek pers- agtig; onderste 24 vt. bevat ver- spreide kwartskorrels tot 1 mm. in deursnee; baie kalkhoudende knolle (Rooilae)	294	1	569	6	Sandstone and siltstone, light red chocolate-brown; purplish in parts; bottom 24 ft. contains scattered quartz grains up to 1 mm. in diameter; many cal- careous nodules (Red Beds).
Sandsteen, vaalwit, wit, sjokolade- bruin, fynkorrelrig, plek-plek middelkorrelrig, selde grofkor- relrig (Moltenolae)	61	3	630	9	Sandstone, grey - white, white chocolate-brown, fine-grained medium - grained in parts seldom coarse-grained (Molten- Beds).
Moddersteen, sjokoladebruin ; plek-plek persagtig in onderste deel	36	11	—	—	Mudstone, chocolate - brown purplish in parts towards bot- tom.
Moddersteen, vaal-groen, met san- derige mikahoudende dele en dun mikahoudende vaalgroen sandsteenlagies	7	2	—	—	Mudstone, grey-green, with sandy micaceous parts and thin, mica- ceous grey - green sandstone bands.
Moddersteen, sjokoladebruin en donkerbruin met enkele ligvaal en persbruin dele na onder	44	6	—	—	Mudstone, chocolate-brown and dark brown, with occasional light grey and purple-brown parts towards bottom.
Moddersteen, ligvaal, persagtig en bruin	48	4	767	8	Mudstone, light grey, purplish and brown.
Moddersteen, vaal, plek-plek met kalsietstrepies en kalkhoudende knolletjies	208	4	976	0	Mudstone, grey, with calcite streaks and small calcareous nodules in parts.
Moddersteen, ligvaal; swart in onderste deel	17	6	994	6	Mudstone, light grey; black towards bottom.
Glanskool, gelaag; middelste 9 dm. bevat dun skalielagies; 1 dm. skalie 7 dm. van onder af	2	3	—	—	Coal, bright, banded; middle 9 in. contains thin shale bands; 1 in. shale 7 in. from bottom.
Skalie, swart, en vaalswart.....	5	5	—	—	Shale, black and grey-black.
Glanskool, gelaag; skalieagtig in onderste helfte	1	3	—	—	Coal, bright, banded; shaly in bottom half.
Skalie, swart; met vier 3 dm. tot 9 dm. skalieagtige steenkool- lagies en een 14 dm. steenkool- laag	9	6	—	—	Shale, black, with four 3-in. to 9-in. shaly coal-bands and a 14-in. coal-band.
Glanskool, gelaag; met 1 dm. moddersteen by bo-ent en baie skalielagies; 3 dm. koolstofhou- dende skalie 24 dm. van bo af; 5 dm. skalie 36 dm. van bo af en 6 dm. skalie 12 dm. van onder af	5	3	1,018	2	Coal, bright, banded; with 1 in. mudstone at top and many shale bands; 3 in. carbonaceous shale 24 in. from top; 5 in. shale 36 in. from top and 6 in. shale 12 in. from bottom.
Skalie, swart; met 'n 6 vt. skalie- agtige steenkoollaag naby bo- ent, 'n 5 vt. soortgelyke laag in middel en enkele dun steenkool- lagies na onder toe; baie wryf- vlakke in middelste 8 vt., by onder- en bo-ent	40	2	—	—	Shale, black; with a 6-ft. shaly coal-band near top, a 5-ft. similar band in middle and occasional thin coal-bands lower down; slickensides in middle 8 ft., at bottom and top.

Bg. 128 (verv.)

B.H. 128 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Glanskool, gelaag; plek-plek erg skalieagtig; erg sideriethoudend	3	0	—	—	Coal, bright, banded; very shaly in parts; very sideritic.
skalie.....	2	11	—	—	Shale.
Glanskool, gelaag, piriethoudend; met baie koolstofhoudende skalielae	1	1	—	—	Coal, bright, banded, pyritic; with many carbonaceous shale bands.
skalie, koolstofhoudend.....	1	10	—	—	Shale, carbonaceous.
skalielagies en steenkoolagies om die beurt	2	0	—	—	Shale bands, thin, alternating with thin coal-bands.
Glanskool en skalie.....	11	—	—	—	Coal, bright and shale.
skalie met steenkoolstrepies by onderent	1	11	1,072	0	Shale with coal-streaks at bottom.
Glanskool, gelaag; met baie skalielagies; erg piriethoudend	4	9	1,076	9	Coal, bright, banded; with many shale bands; very pyritic.
skalie en glanskoolagies.....	7	—	—	—	Shale with bright coal-bands.
Glanskool, gelaag.....	7	—	—	—	Coal, bright, banded.
skalie, koolstofhoudend.....	7	—	—	—	Shale, carbonaceous.
skalie en steenkool, intiem gemeng	2	9	—	—	Shale and coal; intimately mixed.
skalie met enkele dun steenkoolagies	1	11	—	—	Shale with a few thin coal-bands.
skalielae, breed, en breë gemengde steenkool- en skalielae om die beurt; wryfvlakke kom voor	8	0	—	—	Shale bands, broad, and broad mixed coal and shale bands, alternating; slickensides occur.
skalie, swart, en koolstofhoudende skalielagies, met baie dun steenkoolagies	6	6	—	—	Shale, black, and carbonaceous shale, with many thin coal-bands.
skalielae, breed, en breë lae van gemengde steenkool	4	1	—	—	Shale bands, broad, and broad bands of mixed coal.
Glanskool, gelaag; met 'n paar koolstofhoudend skalielagies; plek-plek erg sideriethoudend	2	2	—	—	Coal, bright, banded; with a few carbonaceous shale bands, very sideritic in parts.
skalie, swart.....	4	8	—	—	Shale, black.
skalielae, breed, en breë lae van skalie en gelaagde glanskool, om die beurt	2	7	1,111	2	Shale bands, broad and broad bands of shale and banded bright coal, alternating.
Glanskool, gelaag; met baie dun skalielagies	1	11	—	—	Coal, bright, banded; with many thin shale bands.
skalielae, breed, gelaagde glanskoolae, en skalie- en steenkoolae, om die beurt	10	8	—	—	Shale bands, broad, banded, bright coal-bands, and shale and coal-bands, alternating.
skalie, swart; plek-plek koolstofhoudend, met agtien 3 dm. tot 9 dm. steenkoolagies	38	3	—	—	Shale, black; carbonaceous in parts, with eighteen 3-in. to 9-in. coal-bands.
skalie- en steenkoolae om die beurt	3	0	—	—	Shale bands, alternating with coal-bands.
skalie, swart, en koolstofhoudende skalie; met enkele dun steenkoolagies	18	5	—	—	Shale, black, and carbonaceous shale; with occasional thin coal-bands.
steenkool en skalie, gemeng.....	3	6	—	—	Coal and shale, mixed.
skalie, swart, plek-plek koolstofhoudend; met 'n 5 vt. effens sanderige deel 6 vt. van bo af	17	4	1,204	3	Shale, black, carbonaceous in parts; with a 5 ft. slightly sandy portion 6 ft. from top.
skalie, koolstofhoudend, met 'n bietjie skalieagtige steenkool; enkele matkool- en glanskoolae in onderste 6 vt.; 20 dm. skalieagtige glanskool by onderent	21	6	—	—	Shale, carbonaceous, with a little shaly coal; occasional dull coal-bands and bright coal-bands in bottom 6 ft.; 20 in. shaly bright coal at bottom.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Moddersteen, vaal; met sanderige dele by onderent en steenkool-lagies in boonste deel	3	0	—	—	Mudstone, grey; with sandy portions towards bottom and coal-bands towards top.
Skalie, vaal, fossielhoudend.....	2	9	—	—	Shale, grey, fossiliferous.
Skalie en steenkool.....	2	0	—	—	Shale and coal.
Skalie, koolstofhoudend.....	11	9	1,245	3	Shale, carbonaceous.
Sandsteen, vaal tot vaalwit, veldspaties, middelkorrelrig; met 8 dm. skalieagtige steenkool naby bo-ent	7	3	—	—	Sandstone, grey to grey-white felspathic, medium-grained with 8 in. shaly coal near top.
Skalie, swart.....		8	—	—	Shale, black.
Skalie, steenkoolagtig, en swaar matkool	1	2	—	—	Shale, coaly, and heavy dull coal.
Skalie, swart, en koolstofhoudende skalie; met enkele dun steenkoolagtige lagies en erg sideriet-en piriethoudende glanskool-lagies	22	10	—	—	Shale, black, and carbonaceous shale; with occasional thin coal-bands and very sideritic and pyritic bright coal-bands.
Skalie, koolstofhoudend, swaar matkool en 'n bietjie matkool; piriethoudend	6	8	1,283	10	Shale, carbonaceous, heavy dull coal and a little dull coal pyritic.
Sandsteen, skalieagtig.....	1	1	—	—	Sandstone, shaly.
Skalie en matkool.....	2	7	—	—	Shale and dull coal.
Sandsteen, fynkorrelrig, swart; plek-plek met dun steenkool-lagies	4	4	—	—	Sandstone, fine-grained, black with thin coal-bands in places.
Sandsteen, gelaag, skalieagtig....	6	4	—	—	Sandstone, banded, shaly.
Sandsteen, middelkorrelrig, effens veldspaties, vuilvaal	4	9	—	—	Sandstone, medium-grained, slightly felspathic, dirty grey.
Grintsteen.....		8	—	—	Grit.
Skalie, sanderig in middel, fyn-gelaag	4	6	—	—	Shale, sandy in middle, laminated.
Sandsteen, fynkorrelrig.....	1	6	1,309	7	Sandstone, fine-grained.
Matkool, swaar; met baie groot siderietkorrels, korrelrige piriet, en enkele glanskoolagies in onderste 24 dm. (6 dm. kern-verlies)	5	0	1,315	1	Coal, dull, heavy; with many large siderite pellets, granular pyrite and occasional bright coal-bands in bottom 24 in. (6 in. core loss).
Sandsteen, erg fyrkorrelrig, kruis-gelaag; met donkervaal tot swart lagies	7	7	1,322	8	Sandstone, very fine-grained, cross-bedded; with dark grey to black bands.
Matkool met enkele glanskool-lagies by bo- en onderent; kern is gebreek en bevat enkele wryf-vlakke	3	2	—	—	Coal, dull, with occasional bright coal-bands at top and bottom; core is badly broken and contains a few slickensides.
Matkool met baie groot siderietknolle		6	—	—	Coal, dull, with many large siderite nodules.
Matkool met enkele glanskool-strepies; kern is gebreek	2	2	—	—	Coal, dull, with occasional bright stringers; core is broken.
Skalie, koolstofhoudend, en skalieagtige steenkool	3	0	—	—	Shale, carbonaceous, and shaly coal.
Skalie, koolstofhoudend, swaar matkool, 'n bietjie matkool en glanskool	5	3	—	—	Shale, carbonaceous, heavy dull coal, a little dull coal and bright coal.
Skalie en steenkool, sideriethoudend		8	—	—	Shale and coal, sideritic.
Matkool met glanskoolstrepies...	7		—	—	Coal, dull, with bright stringers.

Bg. 128 (verv.)

B.H. 128 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Glanskool, gelaag, piriet- en kaliethoudend (9 dm. kernverlies tussen 1,322 vt. 8 dm. en 1,339 vt. 5 dm.)		8	1,339	5	Coal, bright, banded, pyritic and calcitic (9 in. core loss between 1,322 ft. 8 in. and 1,339 ft. 5 in.).
Sandsteen, erg fynkorrelrig, vaal-swart en swart; word geleidelik skalieagtig na onder	13	8	—		Sandstone, very fine-grained, grey-black and black; gradually becomes shaly towards bottom.
Skalie, swart; sanderig in boonste deel, enkele dun sandsteenlagies na onder	11	2	—		Shale, black; sandy towards top, occasional thin sandstone bands towards bottom.
Sandsteen, grofkorrelrig, vaal tot vaalswart, veldspaties, met sanderige skalielagies in boonste 12 dm.	5	2	1,369	5	Sandstone, coarse-grained, grey to grey - black, feldspathic, with sandy shale bands in top 12 in.

BOORGAT 128 : KALKVLAKTE 263 : BOREHOLE 128

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Σikte verkry Thickness recovered	M Ware diepte True depth		Nature of strata
T 421 B	N.G.....	<i>Dm.</i> <i>In.</i> 210	<i>Vt.</i> <i>Ft.</i> 994	<i>Dm.</i> <i>In.</i> 6	N.S.
	Glanskool, gelaag; middelste 9 dm. bevat dun skalielagies; 1 dm. skalie 7 dm. van onder af	27	—	—	Coal, bright, banded; middle 9 in. contains thin shale bands; 1 in. shale 7 in. from bottom.
A	N.G.....	194	—	—	N.S.
	Glanskool, gelaag; met 1 dm. moddersteen by bo-ent en baie skalielagies; 3 dm. koolstofhoudende skalie 24 dm. van bo af; 5 dm. skalie 36 dm. van bo af en 6 dm. skalie 12 dm. van onder af; al drie lae is uitgesluit	63	1,018	2	Coal, bright, banded; with 1 mudstone at top and many shale bands; 3 in. carbonaceous shale 24 in. from top; 5 in. shale 36 in. from top and 6 in. shale 12 in. from bottom; all three bands are excluded.
T 422 A	N.G.....	23	1,072	0	N.S.
	Glanskool, gelaag; met baie skalielagies; erg piriethoudend	57	1,076	9	Coal, bright, banded; with many shale bands; very pyritic.
T 423 B	N.G.....	31	1,111	2	N.S.
	Glanskool, gelaag; met baie dun skalielagies	23	—	—	Coal, bright, banded; with many thin shale bands.
A	N.G.....	2,381	1,309	7	N.S.
	Matkool, swaar; met baie groot siderietkorrels, korrelrige piriet en enkele glanskoollagies in onderste 24 dm. (6 dm. kernverlies)	60	1,315	1	Coal, dull, heavy, with many large siderite pellets, granular pyrite and occasional bright coal-bands in bottom 24 (6 in. core loss).
T 424 B	N.G.....	91	1,322	8	N.S.
	Matkool met enkele glanskoollagies by bo- en onderent; kern is gebreek en bevat enkele wryfvlakke	38	—	—	Coal, dull, with occasional bright coal-bands at top and bottom; core is broken and contains a few slickensides.
A	N.G.....	6	—	—	N.S.
	Matkool met enkele glanskoollagies; kern is gebreek	26	—	—	Coal, dull, with occasional bright coal-streaks; core is broken.
	N.G. (9 dm. kernverlies)....	122	1,339	5	N.S. (9 in. core loss).

BOORGAT 128 : KALKVLAKTE 263 : BOREHOLE 128

ANALISE VAN LUGGEDROOGDE STEENKOOL

ANALYSIS OF AIR-DRIED COAL

No. van B.N.I.-monster F.R.I. sample no.	DIKTE (DM.) THICKNESS (IN.)		RU-STEENKOOL RAW COAL							WASTOETS WASHING TEST		DRIESTOP FLOAT							SINK- STOP SINK	
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. C.V.	H ₂ O	As Ash	V.B. V.M.	V.K. F.C.	Swel- syfer Swel- ling number	Groot- te (Dm.) Size (In.)	S.G.	Op- brengs Yield	V.W. C.V.	H ₂ O	As Ash	V.B. V.M.	V.K. F.C.	Swel- syfer Swel- ling number	As Ash	%	
			lb./lb.	%	%	%	%	%	(In.)			%	lb./lb.	%	%	%	%		%	%
T 421	—	27	—	2.2	27.9	31.7	38.2	2½	— ³ / ₁₆	1.40	36.8	—	—	—	—	—	—	—	—	—
B	194	49	—	—	21.6	—	—	—	— ³ / ₁₆	1.40	45.1	—	3.4	10.4	34.4	51.8	4½	—	—	—
A	14 646																			
T 422	—	57	—	2.2	28.7	27.9	41.2	1½	— ³ / ₁₆	1.40	24.1	—	—	—	—	—	—	—	—	—
A	413																			
T 423	—	23	—	2.5	22.4	31.3	43.8	2½	— ³ / ₁₆	1.40	34.5	—	—	—	—	—	—	—	—	—
B	2,358	60	—	1.8	34.3	23.2	40.7	—	—1	1.58	34.2	—	—	—	—	—	—	—	—	—
A	—																			
T 424	—	38	—	2.7	21.1	23.2	53.0	F	—1	1.58	40.0	—	—	—	—	—	—	—	—	—
B	91																			
A	—	26	—	2.2	38.8	19.1	39.9	F	—1	1.58	34.1	—	—	—	—	—	—	—	—	—

BOORGAT 129 : DRAAIOM 326 : BOREHOLE 129

Kern $3\frac{1}{2}$ dm.Core $3\frac{1}{2}$ in

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sand.....	10	0	10	0	Sand.
Sandsteen en slijksteen, sjokolade-bruin tot ligbruin	252	0	262	0	Sandstone and siltstone, chocolate brown to light brown.
Sandsteen bruin, fynkorrelrig; met enkele kwartskorrels tot 1 mm. in deursnee in boonste deel	11	3	—	—	Sandstone, brown, fine-grained with occasional quartz grains up to 1 mm. in diameter towards top.
Sandsteen, fynkorrelrig, bruin, plek-plek fyngelaag; met baie onreëlmatige insluitels van 'n fynerkorrelrige sandsteen; kwartskorrels tot 1 sm. in deursnee hier en daar; kalsietknolle (Rooilae)	34	9	—	—	Sandstone, fine-grained, brown, laminated in parts; with numerous irregular inclusions of a finer-grained sandstone; quartz grains up to 1 cm. diameter here and there; calcite nodules (Rooilae Beds).
Sandsteen, middelkorrelrig, bruin, met enkele groot kwartskorrels	1	4	—	—	Sandstone, medium-grained, brown, with occasional large quartz grains.
Sandsteen, fynkorrelrig, bruin....		10			Sandstone, fine-grained, brown.
Sandsteen, veldspaties, fynkorrelrig tot grintagtig, met baie hoekige tot geronde kwartspoelklippies; kalkhoudend (Moltenolae)	34	5	345	0	Sandstone, felspathic, fine-grained to gritty, with many angular to rounded quartz pebbles; calcareous (Molteno Beds).
Moddersteen, sjokoladebruin in boonste tweederdes, pers en bruin in onderste eenderde	6	0	—	—	Mudstone, chocolate-brown in two-thirds, purple and brown in bottom one-third.
Moddersteen, liggers, geelbruin en vaal; kalkhoudend	80	0	—	—	Mudstone, light purple, yellowish purple and grey; calcareous.
Moddersteen, ligvaal, swart na onder	89	6	521	6	Mudstone, light grey, black towards bottom.
Skalie.....		3		—	Shale.
Glanskool, erg fyngelaag; onderste 3 dm. skalieagtig	1	0	—	—	Coal, bright, very thinly banded; bottom 3 in. shaly.
Skalie.....		4		—	Shale.
Glanskool, gelaag; onderste 2 dm. met skalielagies	1	0	—	—	Coal, bright, banded; bottom 2 in. with shale bands.
Skalie met glanskoollaartjies....		4		—	Shale with bright coal-stringers.
Glanskool, gelaag; met breë vitrietlagies; effens kalsiet- en piriethoudend	2	4	526	9	Coal, bright, banded; with black vitrain bands; slightly calcareous and pyritic.
Skalie en kleiskalie, swart en vaal-swart, met drie 2 dm. tot 6 dm. steenkoollagies	14	10	—	—	Shale and clay-shale, black and grey-black, with three 2-in. to 6-in. coal-bands.
Skalie, swart, met twaalf 2 dm. tot 10 dm. skalieagtige steenkoollagies	13	10	—	—	Shale, black, with twelve 2 in. to 10-in. shaly coal-bands.
Skalielae en glanskoollae, intiem gemeng; met enkele breë skalielae	4	1	559	6	Shale bands and bright coal-bands intimately mixed; with occasional broad shale bands.
Skalie met lae van gemengde steenkoel en skalie	2	9	—	—	Shale with bands of mixed sandstone and shale.
Skalielae en steenkoollae gemeng, met enkele breë glanskoollae en skalielae	9	11	572	2	Shale bands and coal-bands mixed with occasional broad coal-bands and shale bands.
Glanskool, gelaag; met enkele skalielaartjies	1	8	—	—	Coal, bright, banded; with occasional shale stringers.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	<i>Vt.</i> <i>Ft.</i>	<i>Dm.</i> <i>In.</i>	<i>Vt.</i> <i>Ft.</i>	<i>Dm.</i> <i>In.</i>	
skalie, koolstofhoudend, met 'n bietjie glanskool in onderste 4 dm.	1	8	—	—	Shale, carbonaceous, with some bright coal in bottom 4 in.
glanskool, gelaag, effens skalieagtig en sideriethoudend	2	1	577	7	Coal, bright, banded, slightly shaly and sideritic.
skalie met baie lae van gemengde skalie en steenkool	5	5	583	0	Shale with many bands of mixed shale and coal.
glanskool, gelaag; met 4 dm. skalie 12 dm. van bo af, 6 dm. skalie 41 dm. van bo af en 1 dm. skalie 16 dm. van onder af; enkele lae van intiem gemengde steenkool en skalie; kalsiet- en piriethoudend	5	8	588	8	Coal, bright, banded; with 4 in. shale 12 in. from top, 6 in. shale 41 in. from top and 1 in. shale 16 in. from bottom; occasional bands of intimately mixed coal and shale; calcitic and pyritic.
skalie met 10 dm. en 14 dm. glanskool naby die middel	6	0	595	0	Shale with 10 in. and 14 in. bright coal near middle.
glanskool, gelaag; met 3 dm. skalie 6 dm. van bo af; effens piriethoudend	2	2	—	—	Coal, bright, banded; with 3 in. shale 6 in. from top; slightly pyritic.
skalie met agt 2 dm. tot 9 dm. steenkoolagies	7	4	604	6	Shale with eight 2-in. to 9-in. coal-bands.
glanskool, gelaag; skalieagtig na onder; effens piriethoudend	1	4	—	—	Coal, bright, banded; shaly towards bottom; slightly pyritic.
skalie met twee dun steenkoolagies	5	4	611	5	Shale with two thin coal-bands.
glanskool, gelaag; met 7 dm. skalie 11 dm. van bo af, 3 dm. skalie en skalieagtige steenkool 17 dm. van onder af en 2½ dm. skalie 20 dm. van bo af; effens piriethoudend in boonste helfte	3	11	—	—	Coal, bright, banded; with 7 in. shale 11 in. from top, 3 in. shale and shaly coal 17 in. from bottom and 2½ in. shale 20 in. from top; slightly pyritic in top half.
skalie gemeng met gelaagde glanskool; effens sideriethoudend	1	10	617	2	Shale mixed with banded bright coal; slightly sideritic.
skalie met steenkoolstrepies en steenkoolagies	42	0	659	5	Shale with coal-streaks and coal-bands.
skalie, sanderig	—	7	660	0	Shale, sandy.
glanskool, gelaag; met baie skalieagies; piriethoudend; effens kalsiethoudend na onder	2	8	662	8	Coal, bright, banded; with many shale bands; pyritic; slightly calcitic towards bottom.
skalie met 'n paar steenkool-aartjies	1	7	664	3	Shale with a few coal-stringers.
glanskool, gelaag; met baie skalieagies; erg piriethoudend by bovent en effens sideriethoudend in onderste deel	2	11	667	2	Coal, bright, banded; with many shale bands; very pyritic at top and slightly sideritic towards bottom.
skalie, piriethoudend	5	10	—	—	Shale, pyritic.
skalie met enkele steenkoolaartjies	4	6	—	—	Shale with occasional coal-stringers.
skalie, vaalswart, met kwartskorrels	4	0	—	—	Shale, grey-black, with quartz grains.
skalie met skalieagtige steenkool	6	8	—	—	Shale with shaly coal.
skalie, vaalswart	—	10	689	0	Shale, grey-black.
skalie, vaal, sanderig, met sandsteenlense	4	3	—	—	Shale, grey, sandy, with sandstone lenses.
skalie, vaal tot swart, met 'n paar steenkoolagies; sanderig in onderste deel	7	1	—	—	Shale, grey to black, with a few coal-bands; sandy towards bottom.
skalie, vaal, sanderig; met dun wit sandsteenagies	15	0	—	—	Shale, grey, sandy; with thin white sandstone bands.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Skalie, swart; met twee 6 dm. sandsteenlagies	5	0	—		Shale, black; with two sandstone bands.
Sandsteen, fyn- tot grofkorrelrig, grys tot wit	7	7	—		Sandstone, fine- to coarse-grained, grey to white.
Skalie, vaal, en sanderige skalie; met dun sandsteenlagies	13	4	741	3	Shale, grey, and sandy shale, with thin sandstone bands.
Skalie, sanderig.....	1	1	—		Shale, sandy.
Skalie, swart.....	7	9	—		Shale, black.
Sandsteen en sanderige vaal skalie	5	2	—		Sandstone and sandy grey shale.
Skalie, swart.....	1	9	—		Shale, black.
Skalie, vaal tot swart, met dun grys sandsteenlagies	10	0	—		Shale, grey to black, with grey sandstone bands.
Skalie, swart.....	4	2	—		Shale, black.
Skalie, vaal en swart, en skalie-agtige sandsteen	13	8	—		Shale, grey and black, and sandstone.
Sandsteen, wit, grofkorrelrig....	3	6	—		Sandstone, white, coarse-grained.
Skalie, swart, en grys sanderige skalie	6	8	795	5	Shale, black, and grey sandy shale.

BOORGAT 129 : DRAAIOM 326 : BOREHOLE 129

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recorded	Ware diepte True depth		Nature of strata
			Vt. Ft.	Dm. In.	
T 425	N.G.....	Dm. In. 3	521	9	N.S.
	Glanskool, baie fyngelaag; onderste 3 dm. skaliagtig	12	—	—	Coal, bright, very finely banded; bottom 3 in. shaly.
	N.G.....	4	—	—	N.S.
	Glanskool, gelaag; onderste 2 dm. met skalielagies	12	—	—	Coal, bright, banded; bottom 2 in. with shale bands.
	N.G.....	4	—	—	N.S.
	Glanskool, gelaag, met breë vitrietlagies; effens kalsiet- en piriethoudend	28	526	9	Coal, bright, banded; with broad vitrain bands; slightly calcitic and pyritic.
	N.G.....	545	572	2	N.S.
B	Glanskool, gelaag; met enkele skaliestrepies	20	—	—	Coal, bright, banded; with occasional shale stringers.
A	N.G.....	20	—	—	N.S.
	Glanskool, gelaag, effens ska- liagtig en sideriethoudend	25	577	7	Coal, bright, banded, slightly shaly and sideritic.
T 426	N.G.....	65	583	0	N.S.
A	Glanskool, gelaag; met 4 dm. skalie 12 dm. van bo af, uitgesluit; 6 dm. skalie 41 dm. van bo af, uitgesluit; en 1 dm. skalie 16 dm. van onder af; enkele lae van intiem gemengde steenkool en skalie; kalsiet- en piriethoudend	68	588	8	Coal, bright, banded; with 4 in. shale 12 in. from top, excluded; 6 in. shale 41 in. from top, excluded; and 1 in. shale 16 in. from bottom; occasional bands of intimately mixed coal and shale; calcitic and pyritic.
T 468	N.G.....	72	595	0	N.S.
D	Glanskool, gelaag; met 3 dm. skalie 6 dm. van bo af; effens piriethoudend	26	—	—	Coal, bright, banded; with 3 in. shale 6 in. from top; slightly pyritic.
	N.G.....	88	—	—	N.S.
C	Glanskool, gelaag; skaliagtig in onderste deel; effens piriethoudend	16	—	—	Coal, bright, banded; shaly towards bottom; slightly pyritic.
	N.G.....	64	611	5	N.S.
B	Glanskool, gelaag; met 7 dm. skalie 11 dm. van bo af, en 3 dm. skalie en skaliagtige steenkool 17 dm. van onder af, uitgesluit; 2½ dm. skalie 20 dm. van bo af; effens piriethoudend in boonste helfte	47	615	4	Coal, bright, banded; with 7 in. shale 11 in. from top, and 3 in. shale and shaly coal 17 in. from bottom, excluded; 2½ in. shale 20 in. from top; slightly pyritic in top half.
	N.G.....	536	660	0	N.S.
A	Glanskool, gelaag; met baie skalielagies; piriethoudend; effens kalsiethoudend na onder	32	662	8	Coal, bright, banded; with many shale bands; pyritic; slightly calcitic towards bottom.
T 469	N.G.....	19	664	3	N.S.
A	Glanskool, gelaag; met baie skalielagies; erg piriethou- dend by bo-ent en effens sideriethoudend by onder- ent	35	667	2	Coal, bright, banded, with many shale bands; very pyritic at top and slightly sideritic towards bottom.

BOORGAT 129 : DRAAIOM 326 : BOREHOLE 129

ANALISE VAN LUGGEDROOGDE STEENKOOI

ANALYSIS OF AIR-DRIED COAL

No. van B.N.I.-monster F.R.I. sample no.	DIKTE (DM.) THICKNESS (IN.)		RU-STEENKOOI RAW COAL						WASTOETS WASHING TEST		DRYSTOF FLOAT						SINK- STOF SINK	
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	Groot- te (lm.) Size (in.)	S.G.	Op- brengs Yield %	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	As Ash %
T 425 C	11	52	—	—	24.1	—	—	—	$-\frac{3}{16}$	1.40	40.7	—	2.3	10.0	38.0	49.7	4 $\frac{1}{2}$	33.7
	545	20	—	—	20.9	—	—	—	$-\frac{3}{16}$	1.40	50.7	—	2.4	9.4	35.3	52.9	5	32.8
	20	25	—	—	16.4	—	—	—	$-\frac{3}{16}$	1.40	59.3	—	2.3	9.1	35.4	53.2	4	27.1
T 426 A	65	58	—	—	23.2	—	—	—	$-\frac{3}{16}$	1.40	52.1	—	2.5	8.8	34.4	54.3	5	38.9
	10	76	—	—	29.7	—	—	—	$-\frac{3}{16}$	1.40	41.1	13.1	2.7	9.9	37.0	50.4	3 $\frac{1}{2}$	43.6
T 468 D	88	26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
C	16	16	11.5	2.4	20.3	33.3	44.0	5	—	—	—	—	—	—	—	—	—	—
	67	37	—	—	24.6	—	—	—	$-\frac{3}{16}$	1.40	46.7	13.2	2.6	8.9	36.5	52.0	4 $\frac{1}{2}$	38.4
	10	37	—	—	28.2	—	—	—	$-\frac{3}{16}$	1.40	45.3	13.6	2.6	6.9	36.1	54.4	4 $\frac{1}{2}$	45.9
A	536	32	—	—	—	—	—	—	$-\frac{3}{16}$	1.40	—	—	—	—	—	—	—	—
	19	35	—	—	30.6	—	—	—	$-\frac{3}{16}$	1.40	38.6	13.3	2.6	8.9	35.5	53.0	3 $\frac{1}{2}$	44.2
T 469 A	—	—	—	—	—	—	—	—	$-\frac{3}{16}$	1.40	—	—	—	—	—	—	—	—

BOORGAT 130 : WELTEVREDEN 451 : BOREHOLE 130

Kern $3\frac{1}{2}$ dm.Core $3\frac{1}{2}$ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
and.....	4	6	4	6	Sand.
Oppervlakkalksteen en grond....	19	6	24	0	Surface-limestone and soil.
andsteen, middelkorrelrig, wit- bruin, met gebreekte stukgies, skaliegatige sandsteen in middel (baie kern verloor)	5	6	32	6	Sandstone, medium-grained, whitish-brown, with broken pieces of shaly sandstone in middle (much core lost).
Moddersteen, sanderig, en fynkor- relrige, vaal veldspatiese sand- steen met enkele groot kwarts- korrels	3	0	45	0	Mudstone, sandy; and fine- grained, grey feldspathic sand- stone with occasional large quartz grains.
andsteen, vaal, middelkorrelrig, veldspaties, fossielhoudend	4	0	—	—	Sandstone, grey, medium-grained, feldspathic, fossiliferous.
kalie, ligvaal, plek-plek sanderig; met enkele dun sandsteenlagies	6	2	—	—	Shale, light grey, sandy in parts; with occasional thin sandstone bands.
andsteen, kleierig, bevat groot kwartskorrels	7	7	—	—	Sandstone, clayey, containing large quartz grains.
andsteen, kleierig, bevat groot kwartskorrels, donkervaal; en kleiskalie	3	6	—	—	Sandstone, clayey, containing large quartz grains, dark grey; and clay-shale.
andsteen, kleierig, vaalswart tot swart, bevat groot kwartskorrels en kele half-geronde tot hoekige kwartspoelklippies tot $\frac{1}{2}$ dm. deursnee; onderste 48 dm. is swart	14	8	84	4	Sandstone, clayey grey-black to black, containing large quartz grains as well as occasional semi-rounded to angular quartz pebbles up to $\frac{1}{2}$ in. diameter; bottom 48 in. is black.
andsteen, swart tot vaalswart, fynkorrelrig tot skaliegatig	5	6	—	—	Sandstone, black to grey-black, fine-grained to shaly.
andsteen, swart, kleierig.....	22	9	—	—	Sandstone, black, clayey.
irintsteen.....	2	0	—	—	Grit.
kalie, effens sanderig.....	1	6	—	—	Shale, slightly sandy.
atkool.....	—	8	—	—	Coal, dull.
andsteen, skaliegatig, vaal.....	6	4	123	9	Sandstone, shaly, grey.
atkool, glansend; gaan onder toe oor in korrelrige steenkool; piriethoudend; effens kalsiet- houdend in boonste deel	3	11	—	—	Coal, dull, lustrous; merges into granular coal towards bottom; pyritic; slightly calcitic towards top.
ireit en sideriet gemeng met steenkool	—	6	—	—	Pyrite and siderite mixed with coal.
atkool, glansend, effens piriet- houdend, taamlik sideriethou- dend; met enkele dun kalsietare kalie, koolstofhoudend.....	—	10	—	—	Coal, dull, lustrous, slightly pyritic, fairly sideritic; with occasional thin calcite veins.
atkool, glansend; en baie dun skalielagies; taamlik sideriet- houdend	—	5	—	—	Shale, carbonaceous.
atkool, korrelrig, effens glansend in boonste en onderste dele; met enkele dun skalielagies by bo- en onderent; sideriethoudend in middel	3	4	—	—	Coal, dull, lustrous; with many thin shale bands; fairly sideritic.
kalie, steenkool en sideriet ge- meng	4	9	137	6	Coal, dull, granular, slightly lustrous towards top and bot- tom; with occasional thin shale bands at top and bottom; sideritic in middle.
kalie, sanderig, ligvaal, en skalie- agtige sandsteen	3	5	—	—	Shale, coal and siderite mixed.
andsteen, grofkorrelrig, wit en liggrys	9	6	—	—	Shale, sandy, light grey, and shaly sandstone.
	3	5	—	—	Sandstone, coarse-grained, white and light grey.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Skalie, swart, met 'n 6 dm. sanderige lagie	2	11	—	—	Shale, black, with a 6-in. sand band.
Skalie, steenkool en steenkoolagtige skalie	2	10	—	—	Shale, coal and coaly shale.
Glanskool, erg sideriethoudend...		2	—	—	Coal, bright, very sideritic.
Sandsteen, wit, grofkorrelrig, met steenkool en skalielensies	4	0	—	—	Sandstone, white, coarse-grained, with coal and shale lenses.
Sandsteen, skalieagtig, en sanderige skalie	3	7	167	4	Sandstone, shaly, and sandy shale.
Steenkool, gemeng; hoofsaaklik glansende matkool, met enkele kalsietare by bo-ent en $\frac{1}{2}$ dm. skalie 9 dm. van bo af; erg sideriethoudend en taamlik piriethoudend	1	7	—	—	Coal, mixed; mainly lustrous coal, with occasional calcareous veins at top and 9 in. from top; very sideritic and fairly pyritic.
Skalie, en steenkool, gemeng....		4	—	—	Shale and coal, mixed.
Skalie, swart, en sanderige grys skalie, met matkool by onderent	2	7	—	—	Shale, black, and sandy shale, with dull coal at bottom.
Sandsteen.....		7	—	—	Sandstone.
Matkool, glansende matkool in boonste 24 dm.; 6 dm. gemengde steenkool 30 dm. van bo af	3	6	176	0	Coal, dull; lustrous dull coal top 24 in.; 6 in. mixed coal 30 in. from top.
Skalie, gemengde steenkool en skalieagtige steenkool, met groot piriethoules en twee wryfvlakke 11 dm. en 28 dm. van onder af	2	10	—	—	Shale, mixed coal and shaly coal, with large pyrite nodules and two slickensides 11 in. and 28 in. from bottom.
Skalie, grys, sanderig.....	2	10	—	—	Shale, grey, sandy.
Sandsteen, wit, en grys, skalieagtige sandsteen	3	11	—	—	Sandstone, white, and grey, sandy sandstone.
Steenkool, erg sideriethoudend...		6	—	—	Coal, very sideritic.
Skalie, swart, met enkele skalieagtige sandsteenlagies en verspreide kwartskorrels	7	9	—	—	Shale, black, with occasional sandstone bands and scattered quartz grains.
Sandsteen, grofkorrelrig, veldspatietes	3	3	197	2	Sandstone, coarse-grained, pathic.
Matkool, glansend; met $1\frac{1}{2}$ dm. skalie 14 dm. van bo af, twee 3 dm. gelaagde glanskoollagies 20 dm. van bo af en 6 dm. van onder af; erg kalsiethoudend in middel en by onderent	3	9	200	11	Coal, dull, lustrous; with 14 in. shale 14 in. from top, two bands of banded bright coal 20 in. from top and 6 in. from bottom; very calcitic throughout middle and bottom.
Sandsteen, skalieagtig.....	3	4	—	—	Sandstone, shaly.
Sandsteen, wit, grofkorrelrig....	2	5	—	—	Sandstone, white, coarse-grained.
Sandsteen, grys, skalieagtig, en sanderige skalie	7	2	—	—	Sandstone, grey, shaly, and sandy shale.
Grintsteen.....	2	6	—	—	Grit.
Skalie.....		8	—	—	Shale.
Sandsteen, grofkorrelrig; plekplek skalieagtig in onderste 2 vt.	9	11	—	—	Sandstone, coarse-grained, but 2 ft. shaly in parts.
Skalie, swart en grys, met dun skalieagtige sandsteenlagies en sanderige gespikkelde dele	48	7	275	6	Shale, black and grey, with shaly sandstone bands and sandy spotted parts.

BOORGAT 130 : WELTEVREDEN 451 : BOREHOLE 130

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
		<i>Dm.</i> <i>In.</i>	<i>Vt.</i> <i>Ft.</i>	<i>Dm.</i> <i>In.</i>	
T 470	N.G.....	76	123	9	N.S.
D	Matkool, glansend, gaan on- dertoe oor in korrelrige steenkool; piriethoudend; effens kalsiethoudend na bo	47	—		Coal, dull, lustrous, merges into granular coal towards bot- tom; pyritic; slightly calcitic towards top.
C	N.G.....	6	—		N.S.
	Matkool, glansend, effens piriethoudend, taamlik side- riethoudend; met enkele dun kalsietare	10	—		Coal, dull, lustrous, slightly pyritic, fairly sideritic; with occasional calcitic veins.
B	N.G.....	5	—		N.S.
	Matkool, glansend, met baie dun skaliegagies; taamlik sideriethoudend	40	—		Coal, dull, lustrous; with many thin shale bands; fairly side- ritic.
A	Matkool, korrelrig, effens glansend in boonste en onderste dele; met enkele dun skaliegagies by bo- en onderent; sideriethoudend in middel	57	137	6	Coal, dull, granular, slightly lustrous towards top and bottom; with occasional thin shale bands at top and bottom; sideritic in middle.
T 471	N.G.....	43	—		N.S.
B	Steenkool, gemeng; hoofsaak- lik glansende matkool, met enkele kalsietare by bo-ent en $\frac{1}{2}$ dm. skalie 9 dm. van bo af; erg sideriethoudend en taamlik piriethoudend	19	—		Coal, mixed; mainly lustrous dull coal, with occasional calcite veins at top and $\frac{1}{2}$ in. shale 9 in. from top; very sideritic and fairly pyritic.
A	N.G.....	42	—		N.S.
	Matkool; glansende matkool in boonste 24 dm.; 6 dm. gemengde steenkool 30 dm. van bo af	42	176	0	Coal, dull; lustrous dull coal in top 24 in., 6 in. mixed coal 30 in. from top.
T 472	N.G.....	39	197	2	N.S.
A	Matkool, glansend; met $\frac{1}{2}$ dm. skalie 14 dm. van bo af, twee 3 dm. gelaagde glans- koollagies 20 dm. van bo af en 6 dm. van onder af; erg kalsiethoudend in middel en onderent	45	200	11	Coal, dull, lustrous, with $\frac{1}{2}$ in. shale 14 in. from top, two 3-in. bands of banded bright coal 20 in. from top and 6 in. from bottom; very calcitic towards middle and bottom.

BOORGAT 130 : WELTEVREDEN 451 : BOREHOLE 130

ANALISE VAN LUGGEDROOGDE STEENKOOL

ANALYSIS OF AIR-DRIED COAL

No. van B.N.I.-monster F.R.I. sample no.	Dikte (Dm.) Thickness (In.)		RU-STEENKOOL RAW COAL						WASTOETS WASHING TEST		DRY-STOP FLOAT						SINK- STOP SINK	
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	Groot- te (Dm.) Size (In.)	S.G.	Op- brengs Yield %	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	As Ash %
T 470	—	47	—	3.4	27.7	18.0	50.9	P	—	—	—	—	—	—	—	—	—	—
	6	10	—	3.1	27.4	22.2	47.3	P	—	—	—	—	—	—	—	—	—	—
	5	40	—	3.0	33.2	21.2	42.6	P	—	—	—	—	—	—	—	—	—	—
B	—	57	—	3.2	32.1	23.3	41.4	P	—	—	—	—	—	—	—	—	—	—
T 471	—	19	—	—	25.8	—	—	—	—	1.58	56.8	11.3	3.3	17.7	22.9	56.1	P	36.5
	43	42	—	—	22.4	—	—	—	—	1.58	70.7	11.4	3.5	17.1	21.7	57.7	P	35.2
A	—	254	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
T 472	—	45	—	—	27.3	—	—	—	—	1.58	58.4	11.7	3.1	16.4	25.7	54.8	F	42.6

BOORGAT 131 : MAKILLAKA 868 : BOREHOLE 131

Kern $3\frac{1}{2}$ dm.Core $3\frac{1}{2}$ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sand.....	7	0	—	—	Sand.
Sandsteen, wit tot ligrooi, boonste gedeelte verweer	35	6	—	—	Sandstone, white to pink, top portion weathered.
Sandsteen, ligrooi; plek-plek opvallend veldspaties; met enkele kalkhoudende knolle onder in	61	6	—	—	Sandstone, light red; conspicuously felspathic in parts; with calcareous nodules towards bottom.
Sandsteen, ligrooi, met wit dele ondertoe	19	0	—	—	Sandstone, light red, with white patches towards bottom.
Sandsteen, ligrooi, fyngelaag, kruisgelaag	12	0	—	—	Sandstone, light red, well laminated, cross-bedded.
Sandsteen, ligrooi; boonste deel fyngelaag, onderste massief	18	4	155	6	Sandstone, light red; well laminated towards top, massive towards bottom.
Sandsteen, ligrooi, massief, met enkele fyngelaagde dele (Holkranssandsteen)	86	3	243	0	Sandstone, light red, massive, with occasional laminated portions (Cave Sandstone).
Sliksteen, pers; met groenwit dele en enkele kalkhoudende knolle; plek-plek rooibruin	5	6	—	—	Siltstone, purple; with green-white portions and occasional calcareous nodules; red-brown in parts.
Sandsteen en sliksteen (merrel) met ligte vlekke	77	0	325	6	Sandstone and siltstone (marl) with light coloured stains.
Sliksteen, ligrooi, met enkele groot kalkhoudende knolle	10	0	—	—	Siltstone, light red, with occasional large calcareous nodules.
Sliksteen, ligrooi by bo-ent en vaalpers na ondertoe met groot kalkhoudende knolle	15	0	—	—	Siltstone, light red towards top and grey-purple towards bottom; with large calcareous nodules.
Sliksteen, wit, met enkele pers dele en kalkhoudende knolle	10	6	—	—	Siltstone, white, with occasional purple parts and calcareous nodules.
Sliksteen en moddersteen, ligrooi, met baie kalkhoudende knolle in boonste helfte	79	0	440	0	Siltstone and mudstone, light red, with many calcareous nodules in top half.
Sliksteen en fynkorrelrige sandsteen, wit, vaalwit en vaalbruin, met enkele kalkhoudende knolle	40	6	480	6	Siltstone and fine-grained sandstone, white, grey-white and grey-brown, with occasional calcareous nodules.
Sliksteen en moddersteen, ligrooi, met baie kalkhoudende knolle	84	6	—	—	Siltstone and mudstone, light red, with many calcareous nodules.
Sliksteen, wit en bruinpers, met baie kalkhoudende knolle	23	4	588	10	Siltstone, white and brown-purple, with many calcareous nodules.
Sliksteen, wit, met middelkorrelrige sandsteenlagies	1	8	—	—	Siltstone, white, with medium-grained sandstone layers.
Sliksteen en moddersteen, wit en sjokoladebruin, met baie kalkhoudende knolle (Rooilae)	16	1	—	—	Siltstone and mudstone, white and chocolate-brown, with many calcareous nodules (Red Beds).
Sliksteen en moddersteen, wit en bruinpers, met middelkorrelrige sandsteenlagies	1	11	608	6	Siltstone and mudstone, white and brown-purple, with medium-grained sandstone layers.
Sandsteen, wit en vaalwit, middel-tot fynkorrelrig, met enkele grintagtige dele bevattende spoelklippe tot $\frac{3}{4}$ dm. in deursnee; effens kalkhoudend	32	1	—	—	Sandstone, white and grey-white, medium- to fine-grained, with occasional gritty parts containing pebbles up to $\frac{3}{4}$ in. in diameter; slightly calcareous.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sandsteen en grintsteen met enkele groot vaalgroen moddersteen-insluitels en spoelklippies tot $\frac{3}{4}$ dm. in deursnee; effens kalkhoudend (Moltenolae)	16	5	657	0	Sandstone and grit with occasional large grey-green mudstone inclusions and pebbles up to $\frac{3}{4}$ in. diameter; slightly calcareous (Molteno Beds).
Moddersteen, vaalpers, plek-plek bruinpers, effens kalkhoudend	53	0	—	—	Mudstone, grey-purple, brown-purple in parts, slightly calcareous.
Moddersteen, vaalpers tot bruinpers, effens kalkhoudend	38	3	748	3	Mudstone, grey-purple to brown-purple, slightly calcareous.
Kleiskalie en skalie, ligvaal.....	11	4	—	—	Clay-shale and shale, light-grey.
Skalie, vaalswart.....	7	6	—	—	Shale, grey-black.
Steenkool.....	—	2	—	—	Coal.
Skalie.....	1	0	768	3	Shale.
Glanskool, gelaag; skalieagtig by bo- en onderent; 1 dm. skalie in middel; erg kalsiethoudend	1	8	—	—	Coal, bright, banded; shaly at top and bottom; 1 in. shale in middle; very calcitic.
Skalie en steenkool.....	3	9	—	—	Shale and coal.
Glanskool, gelaag; met 9 dm. koolstofhoudende skalie in middel; skalieagtig na onder; erg kalsiethoudend	2	9	—	—	Coal, bright, banded; with 9 in. carbonaceous shale in middle; shaly towards bottom; very calcitic.
Skalie.....	2	6	—	—	Shale.
Glanskool, gelaag; skalieagtig bo en onder	1	4	—	—	Coal, bright, banded; shaly towards top and bottom.
Skalie met twee steenkoolagtige lagies	2	2	—	—	Shale with two coaly bands.
Skalielae en glanskoolae om die beurt	5	9	788	2	Shale bands alternating with bright coal-bands.
Skalie, swart; met vyf 4 dm. tot 8 dm. steenkoolagtige lagies	9	11	—	—	Shale, black; with five 4-in. to 8-in. coaly bands.
Skalie en steenkool.....	1	1	799	2	Shale and coal.
Glanskool, gelaag; vitrietagtig in middel en skalieagtig onder; piriët- en kalsiethoudend	2	5	—	—	Coal, bright, banded; vitrainous towards middle and shaly towards bottom; pyritic and calcitic.
Skalie, met 'n 11 dm. glanskool-laa 7 dm. van bo af; wryfvlak by onderent	2	2	—	—	Shale, with an 11-in. bright coal band 7 in. from top; slickensided towards bottom.
Glanskool, gelaag; onderste deel skalieagtig; wryfvlak in middel; erg piriethoudend	2	0	805	9	Coal, bright, banded; shaly towards bottom; slickensided in middle; very pyritic.
Skalie, swart, plek-plek met wryfvlakke	8	3	—	—	Shale, black, with slickensided in parts.
Steenkool en skalie.....	—	10	—	—	Coal and shale.
Skalie.....	—	6	815	4	Shale.
Glanskool, gelaag; met enkele dun skalielagies in boonste en onderste dele; plek-plek vitrietagtig; taamlik kalsiethoudend	2	9	818	1	Coal, bright, banded; with a few thin shale bands towards top and bottom; vitrainous in parts; fairly calcitic.
Skalie, koolstofhoudend; plek-plek met wryfvlakke	5	10	—	—	Shale, carbonaceous; with slickensides in parts.
Skalie en steenkool.....	7	3	—	—	Shale and coal.
Skalie.....	1	0	—	—	Shale.
Glanskool, gelaag; skalieagtig in boonste helfte	1	4	—	—	Coal, bright, banded; shaly in top half.
Skalie en steenkool, fyngelaag...	2	5	—	—	Shale and coal, laminated.
Skalie en steenkool.....	13	3	849	2	Shale and coal, mixed.

Bg. 131 (verv.)

B.H. 131 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Skalie, swart; met baie verspreide kwartskorrels	3	2	—	—	Shale, black; with many scattered quartz grains.
Skalie, plek-plek effens koolstofhoudend	16	0	—	—	Shale, carbonaceous in parts.
Skalie, swart; met baie verspreide kwartskorrels	2	6	—	—	Shale, black; with many scattered quartz grains.
Skalie, plek-plek koolstofhoudend	22	0	—	—	Shale, carbonaceous in places.
Skalie en steenkool, gemeng.	1	6	—	—	Shale and coal, mixed.
Skalie, swart, plek-plek koolstofhoudend	13	6	907	10	Shale, black, carbonaceous in parts.
Skalie, vaalswart; met kwartskorrels, sommige tot $\frac{3}{8}$ dm. in deursnee	10	0	—	—	Shale, grey-black; with quartz grains, some up to $\frac{3}{8}$ in. in diameter.
Skalie, swart, plek-plek koolstofhoudend	5	6	—	—	Shale, black, carbonaceous in parts.
Sandsteen, grofkorrelrig in onderste en skalieagtig in boonste deel	8	3	931	7	Sandstone, coarse-grained towards bottom and shaly towards top.
Veranderde sedimente, skis en graniet. (Kern alles deurmeekaar)	45	0	977	0	Altered sediments, schist and granite. (All the core mixed up).

BOORGAT 131 : MAKILLAKA 868 : BOREHOLE 131

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
			Vt. Ft.	Dm. In.	
U 154 C	N.G.	Dm. In. 13	Vt. Ft. 799	Dm. In. 2	N.S.
	Glanskool, gelaag; vitrietagtig in middel en skalieagtig onder; piriet- en kalsiethoudend	29	—	—	Coal, bright, banded; vitrainous towards middle and shaly towards bottom; pyritic and calcitic.
B	N.G.	26	—	—	N.S.
	Glanskool, gelaag; onderste deel skalieagtig; erg piriethoudend; wryfvlak in middel	24	—	—	Coal, bright, banded; shaly towards bottom; very pyritic; slickenside in middle.
A	N.G.	115	—	—	N.S.
	Glanskool, gelaag; met enkele dun skalielagies in boonste en onderste dele; plek-plek vitrietagtig; taamlik kalsiethoudend	33	818	1	Coal, bright, banded; with occasional thin shale bands towards top and bottom; vitrainous in parts; fairly calcitic.

BOORGAT 131 : MAKILLAKA 868 : BOREHOLE 131

ANALISE VAN LUGGEDROOGDE STEENKOOI

ANALYSIS OF AIR-DRIED COAL

No. van B.N.I.-monster F.R.I. sample no.	DIKTE (DM.) THICKNESS (IN.)		RU-STEENKOOI RAW COAL						WASTOETS WASHING TEST		DRY-STOP FLOAT						SINK- STOP SINK	
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	Groot- te (DM.) Size (in.)	S.G.	Op- brengs Yield %	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	As Ash %
U 154 C	— 26 — 115	29 24 33	— — —	— — —	17.2 24.5 15.3	— — —	— — —	— — —	— ^{3/16} — ^{3/16} — ^{3/16}	1.40 1.40 1.40	58.6 42.1 66.2	— — —	3.1 3.1 2.5	7.7 9.2 8.5	35.4 35.9 36.7	53.8 51.8 52.3	3½ 3 4	30.7 35.6 28.5

BOORGAT 132 : MOOTCHOOASELY 1227 : BOREHOLE 132

Kern 3½ dm.

Core 3½ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Grond en verweerde sandsteen, geen kernwins (Holkranssandsteen)	86	0	86	0	Soil and weathered sandstone, no core recovery (Cave Sandstone).
Sliksteen en merrel, ligrooi, wit dele en bruin dele met wit spikkels	9	0	95	0	Siltstone and marl, light red, white parts and brown parts with white spots.
Merrel, ligbruin, donkerbruin, met pers en groenwit dele; klein wit spikkels volop maar groot kalkhoudende knolle is skaars	33	0	—	—	Marl, light brown, dark brown, with purple and green white parts; small white spots abundant but large calcareous nodules are scarce.
Merrel, bruin, met wit dele....	34	0	169	0	Marl, brown, with white portions.
Merrel, donkerbruin, met wit en pers dele	14	6	—	—	Marl, dark brown, with white and purple portions.
Merrel, groenwit.....	2	8	—	—	Marl, green-white.
Merrel, bruin, met pers dele en baie kalkhoudende knolle	33	0	—	—	Marl, brown, with purple parts and many calcareous nodules.
Merrel, wit.....	4	4	—	—	Marl, white.
Moddersteen, bruin, met enkele groot kalkhoudende knolle	12	9	—	—	Mudstone, brown, with occasional large calcareous nodules.
Sliksteen, wit.....	12	2	257	6	Siltstone, white.
Merrel, bruin.....	7	1	263	1	Marl, brown.
Moddersteen en merrel, donkerbruin en pers	10	5	—	—	Mudstone and marl, dark brown and purple.
Merrel, bruin, met moddersteen in onderste helfte	20	7	—	—	Marl, brown, with mudstone in bottom half.
Moddersteen, bruin, en bruin merrel	49	1	344	6	Mudstone, brown, and brown marl.
Sliksteen, wit, met groot kalkhoudende knolle by onderent	12	3	—	—	Siltstone, white, with large calcareous nodules at bottom.
Sliksteen en moddersteen, pers en vaalpers (Rooilae)	11	10	—	—	Siltstone and mudstone, purple and grey-purple (Red Beds).
Sliksteen, witgroen, met enkele fynkorrelrige sandsteenlagies	3	2	—	—	Siltstone, white-green, with occasional fine-grained sandstone layers.
Merrel met verspreide groterige kwartskorrels (Moltenolae)	4	5	—	—	Marl with scattered fairly big quartz grains (Molteno Beds).
Moddersteen, ligpers, bruinpers, met enkele kalkhoudende knolle	32	2	409	6	Mudstone, light purple, brown-purple, with occasional calcareous nodules.
Moddersteen, bruin, bruinpers, vaalpers; met verspreide vaal dele en enkele kalkhoudende knolle	55	8	—	—	Mudstone, brown, brown-purple, grey-purple; with scattered grey parts and occasional calcareous nodules.
Moddersteen, persagtig en vaalpers; met enkele kalkspikkels	51	3	—	—	Mudstone, purplish and grey-purple with occasional calcareous spots.
Moddersteen, vaal; met 12 dm. kalksteen 10 vt. van onder af	67	9	—	—	Mudstone, grey; with 12 in. limestone 10 ft. from bottom.
Kleiskalie, vaalswart.....	6	4	599	10	Clay-shale, grey-black.
Glanskool, gelaag, erg kalsiethoudend; met enkele skalielagies	1	11	—	—	Coal, bright, banded, very calcitic; with occasional shale bands.
Skalie.....	6	—	—	—	Shale.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Glanskool , gelaag; met 3 dm. skalie 6 dm. van bo af; erg piriethoudend in onderste 4 dm.; erg kalsiethoudend (2 dm. kern-verlies tussen 599 vt. 10 dm. en 606 vt. 1 dm.)	3	8	606	1	Coal, bright, banded; with 3 in. shale 6 in. from top; very pyritic in bottom 4 in.; very calcitic (2 in. core loss between 599 ft. 10 in. and 606 ft. 1 in.)
Skalie, swart, en koolstofhoudende skalie; met enkele dun steenkoolagies in onderste eenderde deel en 14 dm. skalieagtige steenkool 24 dm. van bo af	18	9	—	—	Shale, black, and carbonaceous; shale; with occasional thin coal-bands in bottom one-third portion and 14 in. shaly coal 24 in. from top.
Skalie en steenkool, fyn tussen-gelaag, met dun skalielagies tussenin	32	10	—	—	Shale and coal, finely interbanded with thin shale bands in between.
Glanskool , korrelrig in boonste 4 dm., erg skalieagtig na onder toe, kalsiet- en piriethoudend	2	5	661	0	Coal, bright, granular in top 4 in. very shaly towards bottom calcitic and pyritic.
Skalie met drie 6 dm. steenkoolagies	8	0	669	0	Shale with three 6-in. coal-bands
Glanskool , gelaag; met twee 1 dm. skalielagies naby bo-ent en onderent; effens piri- en kalsiethoudend	2	7	—	—	Coal, bright, banded; with two 1-in. shale bands near top and bottom; slightly pyritic and calcitic.
Skalie en skalieagtige steenkool..		9	—	—	Shale and shaly coal.
Glanskool , gelaag; met baie skalie-lagies; kalsiethoudend	1	8	—	—	Coal, bright, banded; with many shale bands; calcitic.
Skalie.....		6	—	—	Shale.
Glanskool , gelaag, effens piriethoudend; met 4½ dm. skalie 11 dm. van onder af	3	6	—	—	Coal, bright, banded, slightly pyritic; with 4½ in. shale 11 in. from bottom.
Skalie met twee dun steenkoolagies	4	7	—	—	Shale with two thin coal-bands.
Skalielae en glanskoollae om die beurt; steenkoollae is sideriethoudend, kalsiet- en piriethoudend	3	9	—	—	Shale bands alternating with bright coal-bands; coal-bands are sideritic, calcitic and pyritic.
Glanskool , gelaag; erg piriethoudend in boonste en sideriethoudend in onderste deel	2	8	689	0	Coal, bright, banded; very pyritic towards top and sideritic towards bottom.
Skalie met vyftien 1 dm. tot 7 dm. steenkoolagies en enkele wryfvlakke	17	8	—	—	Shale with fifteen 1 in. to 7 in. coal-bands and a few slickensides.
Glanskool , gelaag; erg skalieagtig by bo-ent en sideriet- en piriethoudend in middel en by bo-ent	2	0	—	—	Coal, bright, banded; very shaly towards top and sideritic and pyritic in middle and at top.
Skalie, tussengelaag met skalieagtige steenkoolagies	7	4	716	0	Shale, interbanded with shaly coal-bands.
Glanskool , gelaag; erg piriethoudend, sideriethoudend en skalieagtig, veral in onderste helfte	1	4	—	—	Coal, bright, banded; very pyritic sideritic and shaly especially in bottom half.
Skalie.....	1	0	—	—	Shale.
Glanskool , gelaag; erg skalieagtig na onder; erg piri- en kalsiethoudend; plek-plek korrelrig	1	6	—	—	Coal, bright, banded; very shaly towards bottom; very pyritic and calcitic; granular in parts.
Skalie met enkele kwartskorrels..	1	9	—	—	Shale with occasional quartz grains.
Glanskool , gelaag; met ¾ dm. skalie in boonste deel, piri- en kalsiethoudend by bo- en onderent	1	11	723	6	Coal, bright, banded; with ¾ in. shale towards top; pyritic and calcitic at top and bottom.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Glanskool, erg sideriethoudend, plek-plek korrelrig		4	—		Coal, bright, very sideritic, granular in parts.
Skalie met sestien 2 dm. tot 14 dm. steenkoollagies	19	9	—		Shale with sixteen 2-in. to 14-in. coal-bands.
Glanskool, gelaag, piriethoudend	1	6	—		Coal, bright, banded, pyritic and sideritic.
Skalie met twaalf 1 dm. tot 5 dm. steenkoollagies	11	9	756	10	Shale with twelve 1-in. to 5-in. coal-bands.
Glanskool, gelaag; effens skalieagtig by bo-ent; kalsiethoudend	1	9	—		Coal, bright, banded; slightly shaly towards top; calcitic.
Glanskool, gelaag; met baie dun skalielagies; kalsiethoudend; piriethoudend in middel	2	3	760	10	Coal, bright, banded; with many thin shale bands; calcitic; pyritic in middle.
Skalie, swart, en koolstofhoudende skalie, met enkele dun steenkoollagies	47	0	807	10	Shale, black and carbonaceous shale, with occasional thin coal-bands.
Steenkool, skalieagtig, en steenkoollagtige skalie; met skalielagies; piriethoudend na bo	5	4	—		Coal, shaly, and coaly shale; with shale bands; pyritic towards top.
Skalie, swart, en koolstofhoudende skalie; met enkele matkool- en skalieagtige matkoollagies	43	0	856	2	Shale, black, and carbonaceous shale; with occasional bands of dull coal and shaly dull coal.
Matkool, swaar, glansend; met groot piriethoudende by onderent; kalsiethoudend	3	5	—		Coal, dull, heavy, lustrous; with large pyrite nodules at bottom; calcitic.
Matkool: korrelrig veral in onderste tweederdes; effens piriethoudend	4	11	—		Coal, dull; granular especially in bottom two-thirds; slightly pyritic.
Skalie, koolstofhoudend.....	8	9	—		Shale, carbonaceous.
Skalie, steenkoollagtig, en skalieagtige steenkool; met skalielae (19 dm. kern hier verloor)	4	0	—		Shale, coaly, and shaly coal; with shale bands (19 in. core lost here).
Matkool, gaan oor in gemengde, hoofsaaklik matkool na onder	4	6	—		Coal, dull, merging into mixed, mainly dull coal towards bottom.
Steenkool, gemeng; met twee ½ dm. skalielagies; piriethoudend bo en in middel	4	1	—		Coal, mixed; with two ½-in. shale bands; pyritic towards top and in middle.
Steenkool, gemeng; hoofsaaklik glanskool; gaan oor in glanskool in onderste 24 dm.; taamlik kalsiet- en piriethoudend	3	10	883	3	Coal, mixed; mainly bright coal; merges into bright dull coal in bottom 24 in.; fairly calcitic and pyritic.
Sandsteen, erg fynkorrelrig, vaalbruin	2	9	—		Sandstone, very fine-grained, grey-brown.
Skalie en steenkool; met 'n bietjie sandsteen	1	7	887	7	Shale and coal; with some sandstone.
Matkool met 1 dm. sandsteen naby middel; effens piriethoudend	3	8	—		Coal, dull; with 1-in. sandstone near middle; slightly pyritic.
Steenkool, gemeng; hoofsaaklik matkool; glanskool in onderste deel; taamlik piriethoudend	2	1	—		Coal, mixed; mainly dull coal; bright coal towards bottom; fairly pyritic.
Skalielae, skalieagtige steenkool en matkool	1	11	—		Shale bands, shaly coal and dull coal.
Glanskool, gelaag, kalsiethoudend en effens piriethoudend		10	—		Coal, bright, banded, calcitic and slightly pyritic.
Skalie, steenkoollagtig.....		5	—		Shale, coaly.
Matkool met 'n paar glanskoollae; erg piriethoudend in onderste helfte	6	2	902	8	Coal, dull; with a few bright coal-bands; very pyritic in bottom half.

Bg. 132 (verv.)

B.H. 132 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sandsteen, erg fynkorrelrig, vaal tot swart, gelaag, plek - plek kruisgelaag; wryfvlakke naby onderent	18	6	—	—	Sandstone, very fine-grained, grey to black, banded, cross-bedded in parts; slickensides near bottom.
Skalie en steenkool.....		4	—	—	Shale and coal.
Skalie, swart, sanderig, met baie wryfvlakke	2	1	—	—	Shale, black sandy, with many slickensides.
Sandsteen, vaalswart, fynkorrelrig	2	7	—	—	Sandstone, grey - black, fine-grained.
Sandsteen, wit en vaalwit, erg fynkorrelrig, plek-plek middelkorrelrig	23	10	950	0	Sandstone, white to grey-white, very fine-grained, medium-grained in parts.

BOORGAT 132 : MOOTCHOOASELY 1227 : BOREHOLE 132

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
U 148 C	N.G.....	Dm. In. 76	Vt. Ft. 599	Dm. In. 10	N.S.
	Glanskool, gelaag, erg kalsiet- houdend; met enkele skalie- lagies	23	—	—	Coal, bright, banded, very cal- citic; with occasional shale bands.
	N.G.....	6	—	—	N.S.
	Glanskool, gelaag; met 3 dm. skalie 6 dm. van bo af; erg piriethoudend in onderste 4 dm.; erg kalsiethoudend (2 dm. kernverlies tussen 599 vt. 10 dm. en 606 vt. 1 dm.).	44	—	—	Coal, bright, banded; with 3 in. shale 6 in. from top; very pyritic in bottom 4 in.; very calcitc (2 in. core loss between 599 ft. 10 in. and 606 ft. 1 in.).
A	N.G.....	630	—	—	N.S.
	Glanskool, korrelrig in boon- ste 4 dm., erg skalieagtig na onder toe; kalsiet- en piriethoudend	29	661	0	Coal, bright, granular in top 4 in., very shaly towards bottom, calcitic and pyritic.
U 149 D	N.G.....	96	669	0	N.S.
	Glanskool, gelaag; met twee 1 dm. skalielagies naby bo- ent en onderent; effens piriet- en kalsiethoudend	31	—	—	Coal, bright, banded; with two 1-in. shale bands near top and bottom; slightly pyritic and calcitic.
	N.G.....	9	—	—	N.S.
	Glanskool, gelaag; met baie skalielagies; kalsiethoudend	20	—	—	Coal, bright, banded; with many shale bands; calcitic.
B	N.G.....	6	—	—	N.S.
	Glanskool, gelaag, effens piriethoudend; met 4½ dm. skalie 11 dm. van onder af uitgesluit	42	—	—	Coal, bright, banded, slightly pyritic; with 4½ in. shale 11 in. from bottom excluded.
A	N.G.....	100	—	—	N.S.
	Glanskool, gelaag; erg piriet- houdend in boonste en sideriethoudend in onderste deel	32	689	0	Coal, bright, banded; very pyritic towards top and sideritic towards bottom.
U 150 B	N.G.....	88	716	0	N.S.
	Glanskool, gelaag; erg piriet- houdend, sideriethoudend en skalieagtig veral in on- derste helfte	16	—	—	Coal, bright, banded; very pyritic, sideritic and shaly especially in bottom half.
	N.G.....	51	—	—	N.S.
	Glanskool, gelaag; met ¾ dm. skalie in boonste deel; piriet- en kalsiethoudend by bo- en onderent	23	723	6	Coal, bright, banded; with ¾ in. shale towards top; pyritic and calcitic at top and bottom.
U 151 G	N.G.....	141	756	10	N.S.
	Glanskool, gelaag; effens ska- lieagtig by bo-ent; kalsiet- houdend	21	—	—	Coal, bright, banded; slightly shaly towards top; calcitic.

Bg. 132 (verv.)

B.H. 132 (contd.)

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recorded	Ware diepte True depth		Nature of strata
			Vt. Ft.	Dm. In.	
F	Glanskool, gelaag; met baie dun skalielagies; kalsiet- houdend; piriethoudend in middel	Dm. In. 27	760	10	Coal, bright, banded; with many thin shale bands; calcitic; pyritic in middle.
	N.G.....	564	807	10	N.S.
	N.G.....	580	856	2	N.S.
E	Matkool, swaar, glansend; met groot piriethoude by onderent; kalsiethoudend	41	—		Coal, dull, heavy, lustrous; with large pyritic nodules at bottom; calcitic.
D	Matkool; korrelrig veral in onderste tweederdes; effens piriethoudend	59	—		Coal, dull; granular especially in bottom two-thirds; slight- ly pyritic.
	N.G.....	57	—		N.S.
C	Matkool, gaan oor in gemeng- de, hoofsaaklik matkool na onder	54	—		Coal, dull, merging into mixed, mainly dull coal towards bottom.
B	Steenkool, gemeng; met twee $\frac{1}{2}$ dm. skalielagies; piriethou- dend bo en in middel	49	—		Coal, mixed, with two $\frac{1}{2}$ -in. shale bands; pyritic towards top and in middle.
A	Steenkool, gemeng; hoofsaak- lik glanskool; gaan oor in glanskool in onderste 24 dm.; taamlik kalsiet- en piriethoudend	46	883	3	Coal, mixed; mainly bright coal; merges into bright coal in bottom 24 in.; fairly calci- tic and pyritic.
U 152	N.G.....	19	887	7	N.S.
D	Matkool met 1 dm. sandsteen naby middel; effens piriethou- dend	44	—		Coal, dull; with 1 in. sandstone near middle; slightly pyritic.
C	Steenkool, gemeng; hoofsaak- lik matkool; glanskool in onderste deel; taamlik piriethoudend	25	—		Coal, mixed; mainly dull coal; bright coal towards bottom; fairly pyritic.
	N.G.....	23	—		N.S.
B	Glanskool, gelaag, kalsiethou- dend en effens piriethou- dend	10	—		Coal, bright, banded, calcitic and slightly pyritic.
	N.G.....	5	—		N.S.
A	Matkool met 'n paar glans- koolae; erg piriethoudend in onderste helfte	74	902	8	Coal, dull; with a few bright coal-bands; very pyritic in bottom half.

B.H. 132 (contd.)

Bg. 132 (verv.)

No. van B.N.I.-monster F.R.I. sample no.	Dikte (Dm.) THICKNESS (IN.)		RU-STEENKOOL RAW COAL						WASTOETS WASHING TEST		DRY-STOP FLOAT						SINK- STOP SINK	
	Uite- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. C.V.	H ₂ O %	As %	V.B. V.M.	V.K. F.C.	Swel- syfer Swel- ling number	Groot- te (Dm.) Size (In.)	S.G.	Op- brengs Yield	V.W. C.V.	H ₂ O %	As %	V.B. V.M.	V.K. F.C.	Swel- syfer Swel- ling number	As %
U 151	—	21	—	—	16.1	—	—	—	— ^{3/16}	1.40	56.1	—	3.3	6.5	36.9	53.3	4½	28.3
	—	27	—	—	28.1	—	—	—	— ^{3/16}	1.40	31.2	—	2.0	7.2	38.0	52.8	3½	37.6
	1,144	41	—	—	29.5	—	—	—	—1	1.58	40.3	11.4	3.2	15.6	20.4	60.8	P	38.8
	—	59	—	—	16.7	—	—	—	—1	1.58	78.5	12.0	3.3	12.6	22.3	61.8	P	31.8
	57	54	—	—	21.4	—	—	—	—1	1.58	64.8	11.8	2.8	14.1	23.9	59.2	F	34.7
U 152	—	49	—	—	16.9	—	—	—	—1	1.58	75.0	12.7	2.7	10.3	27.3	59.7	F	56.6
	—	46	—	—	14.6	—	—	—	—1	1.58	77.5	13.2	2.8	7.7	31.8	57.7	2	38.4
	52	44	—	—	17.0	—	—	—	—1	1.58	88.3	12.0	2.0	14.4	23.0	60.6	P	36.7
	—	25	—	—	13.2	—	—	—	—1	1.58	86.8	13.0	2.2	8.7	28.6	60.5	1Ag	43.1
	23	10	12.4	2.0	12.8	28.1	57.1	1Ag	—	—	—	—	—	—	—	—	—	—
A	5	74	—	—	14.4	—	—	—	—1	1.58	88.3	12.5	2.8	10.6	24.6	62.0	F	43.5

BOORGAT 133 : MULA 808 : BOREHOLE 133

Kern $3\frac{1}{2}$ dm.Core $3\frac{1}{2}$ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sand.....	10	0	10	0	Sand.
Sandsteen, erg fynkorrelrig; hoofsaaklik vaalwit in boonste deel en ligrooi in onderste 360 vt.; plek-plek opvallend veldspaties; gelaag en kruisgelaag tussen 320 vt. en 380 vt. (Holkranssandsteen)	420	7	430	7	Sandstone, very fine-grained; mainly grey-white towards top and light pink in bottom 360 ft.; conspicuously feldspathic in parts; bedded and cross-bedded between 320 ft. and 380 ft. (Cave Sandstone).
Sandsteen, erg fynkorrelrig, en sliesteel; ligbruin, plek-plek persagtig met groot kalkhoudende knolle (Rooilae)	329	2	—	—	Sandstone, very fine-grained, and siltstone; light brown, purple in parts; with large calcareous nodules (Red Beds).
Sliksteen, persagtig en wit met baie kalkhoudende knolle; boonste 18 dm. is sanderig met kwartskorrels tot 2 mm. in deursnee	13	8	773	5	Siltstone, purplish and whitish with many calcareous nodules; top 18 in. is sandy with quartz grains up to 2 mm. in diameter
Sliksteen met enkele sandsteenlagies en kwartskorrels tot $\frac{3}{4}$ dm. in deursnee	2	0	—	—	Siltstone, with occasional sandstone layers and quartz grains up to $\frac{3}{4}$ in. in diameter.
Sandsteen, fynkorrelrig tot grintagtig, goedgegelaag, wit, perswit, plek-plek met 'n groenagtige skynsel; veldspaties, liggroen; klei-insluitsels van allerhande vorms en tot 2 dm. in deursnee (Moltenolae)	42	3	819	2	Sandstone, fine-grained to gritty, well-banded, white, purple-white, with a greenish tint in parts; feldspathic; light green clay inclusions of all forms and up to 2 in. in diameter (Molteno Beds).
Moddersteen, sjokoladebruin, persagtig, vaal en vaalpers; vormlose koolstofhoudende deeltjies in onderste 20 vt.	215	7	1,034	9	Mudstone, chocolate-brown, purplish-grey and grey-purple, carbonaceous portions without form in bottom 20 ft.
Steenkool, erg piriethoudend	6	—	1,035	3	Coal, very pyritic and calcitic.
Glanskool, gelaag, taamlik kalsiethoudend	1	5	—	—	Coal, bright, banded, fairly calcitic.
Skalie met enkele steenkoolstrepies	4	—	—	—	Shale, with occasional coal-streaks.
Glanskool, gelaag; effens skalieagtig onder; taamlik piriethoudend	1	4	—	—	Coal, bright, banded; slightly shaly towards bottom; fairly pyritic.
Skalie.....	4	—	—	—	Shale.
Glanskool, gelaag; skalieagtig in onderste 3 dm.; taamlik kalsiethoudend; taamlik piriethoudend veral in boonste deel	1	11	—	—	Coal, bright, banded; shaly in bottom 3 in.; fairly calcitic; fairly pyritic especially towards top.
Skalie.....	2	1	—	—	Shale.
Glanskool, gelaag, effens skalieagtig; kalsiet- en piriethoudend met 'n paar skalielae naby onderent	1	9	1,044	5	Coal, bright, banded; slightly shaly; calcitic and pyritic with a few shale bands near bottom.
Skalie, swart.....	12	0	—	—	Shale, black.
Skalie en steenkool, fyngelaag; met enkele skalielagies	26	6	1,082	11	Shale and coal, laminated; with occasional shale bands.
Glanskool, gelaag; effens skalieagtig onder; effens piriethoudend en taamlik kalsiethoudend	11	—	—	—	Coal, bright, banded; slightly shaly towards bottom; slightly pyritic and fairly calcitic.
Skalie.....	4	—	—	—	Shale.
Glanskool, gelaag; kalsiethoudend	9	—	—	—	Coal, bright, banded, calcitic.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Skalie.....		10	—		Shale.
Glanskool, gelaag; taamluk skalie- agtig; kalsiet- en piriethoudend	1	4	—		Coal, bright, banded, fairly shaly; calcitic and pyritic.
Skalie.....		7	—		Shale.
Glanskool, gelaag; skalieagtig in onderste gedeelte; kalsiethou- dend en effens piriethoudend	1	2½	1,088	10½	Coal, bright, banded; shaly in bottom portion; calcitic and slightly pyritic
Skalie met vyf dun glanskoolagies	8	8½	1,097	7	Shale, with five thin bright coal- bands.
Glanskool, gelaag; kalsiet- en piriethoudend; skalieagtig in boonste 3 dm. en onderste 2 dm.	2	2	—		Coal, bright, banded, calcitic and pyritic; shaly in top 3 in. and bottom 2 in.
Skalie, koolstofhoudend.....		1½	—		Shale, carbonaceous.
Glanskool, gelaag; effens skalie- agtig by onderent; 1 dm. skalie 6 dm. van onder af; erg kalsiet- en piriethoudend	1	3	—		Coal, bright, banded; slightly shaly towards bottom; 1 in. shale 6 in. from bottom; very calcitic and pyritic.
Skalie.....		5½	—		Shale.
Glanskool, gelaag, met baie dun skalielagies by bo- en onderent; taamluk kalsiethoudend en effens piriethoudend	2	3	—		Coal, bright, banded; with many thin shale bands at top and bottom; fairly calcitic and slight- ly pyritic.
Skalie, koolstofhoudend.....		5	—		Shale, carbonaceous.
Glanskool, gelaag; plek-plek erg glansend; met 'n 2 dm. skalie- agtige laag naby middel; erg kalsiethoudend bo en erg piriethou- dend in middel	3	7	1,107	10	Coal, bright, banded, very bright in parts; with a 2-in. shaly band near middle; very calcitic towards top and very pyritic in middle.
Skalie.....	2	11	1,110	9	Shale.
Glanskool, gelaag; skalieagtig in boonste helfte en 1 dm. skalie in middel; taamluk piriethou- dend in onderste helfte en kalsiethou- dend by bo- en onderent	2	9	—		Coal, bright, banded; shaly in top half and 1 in. shale in middle; fairly pyritic in bottom half and calcitic at top and bottom.
Skalie met enkele wryfvlakke....	4	4	1,117	10	Shale with occasional slickensides.
Glanskool, gelaag; skalieagtig veral in onderste helfte; kalsiet- en piriethoudend	2	10	—		Coal, bright, banded; shaly especially in bottom half; calci- tic and pyritic.
Skalie en enkele glanskoolagies..	2	6	—		Shale and some bright coal-bands.
Skalie, koolstofhoudend, en intiem gemengde steenkool en skalie	4	5	—		Shale, carbonaceous, and inti- mately mixed coal and shale.
Glanskool, skalieagtig (8 dm. kern- verlies tussen 1,117 vt. 10 dm. en 1,130 vt.)	1	9	1,130	0	Coal, bright, shaly (8 in. core loss between 1,117 ft. 10 in. and 1,130 ft.).
Skalie, koolstofhoudend.....	2	7	—		Shale, carbonaceous.
Glanskool, gelaag; met 1 dm. skalie naby bo-ent; skalieagtig in middel en in boonste 8 dm.; effens piriethou- en kalsiethoudend	3	0	—		Coal, bright, banded; with 1 in. shale near top; shaly in middle and in top 8 in.; slightly pyritic and calcitic.
Skalie, koolstofhoudend, met ses dun glanskoolagies	6	10	—		Shale, carbonaceous, with six thin bright coal-bands.
Glanskool, gelaag; met enkele skalielagies veral by bo-ent; kalsiet- en piriethoudend	1	5½	—		Coal, bright, banded; with occa- sional shale bands especially towards top; calcitic and pyritic.
Skalie.....		8	—		Shale.
Glanskool, gelaag, plek-plek skalie- agtig	1	0½	—		Coal, bright, banded, shaly in parts.
Skalie.....		4	—		Shale.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Glanskool, gelaag; effens skalieagtig by bo- en onderent; kalsiethoudend bo en piriethoudend veral onder	3	8	1,149	7	Coal, bright, banded; slightly shaly at top and bottom; calcitic towards top and pyritic especially towards bottom.
Skalie met baie sideriethoudende glanskool	4	0	—	—	Shale, with much sideritic bright coal.
Skalie met verspreide kwartskorrels tot 5 mm. in deursnee	15	11	—	—	Shale with scattered quartz grains up to 5 mm. in diameter.
Skalie, swart, en koolstofhoudende skalie, met slegs enkele dun steenkoolagies; onderste 15 vt. is plek-plek steenkoolagtig	121	0	1,290	6	Shale, black, and carbonaceous shale, with only an occasional coal-band; bottom 15 ft. coaly in parts.
Matkool, swaar; korrelrig by onderent en effens glansend in boonste deel	2	8	—	—	Coal, dull, heavy; granular towards bottom and slightly lustrous towards top.
Matkool, deurgaans korrelrig en homogeen	4	4	—	—	Coal, dull; granular and homogeneous throughout.
Skalie, steenkoolagtig, skalieagtige steenkool, swaar matkool en glansende matkool	3	1	—	—	Shale, coaly, shaly coal, heavy dull coal and lustrous dull coal.
Matkool, swaar.....	2	2	—	—	Coal, dull, heavy.
Matkool, swaar, plek-plek skalieagtig; effens piriethoudend	2	4	—	—	Coal, dull, heavy, shaly in parts, slightly pyritic.
Matkool, korrelrig; met 4 dm. gelaagde glanskool in middel; effens kalsiet- en piriethoudend	3	3	—	—	Coal, dull, granular; with 4 in. banded bright coal in middle; slightly calcitic and pyritic.
Steenkool, gemeng; hoofsaaklik glanskool; 1 dm. skalie 11 dm. van bo af; effens kalsiethoudend en taamlik piriethoudend	3	6	—	—	Coal, mixed; mainly bright coal; 1 in. shale 11 in. from top; slightly calcitic and fairly pyritic.
Skalie, steenkoolagtig, en skalieagtige matkool met groot piriethoudende knolle; baie wryfvlakke in boonste gedeelte	2	7	—	—	Shale, coaly, and shaly dull coal, with large pyrite nodules; many slickensides in top portion.
Matkool, plek-plek swaar en skalieagtig; met 'n bietjie glanskool; effens kalsiet- en piriethoudend (6 dm. kernverlies tussen 1,290 vt. 6 dm. en 1,318 vt. 10 dm.)	3	11	1,318	10	Coal, dull, heavy and shaly in parts; with a little bright coal; slightly calcitic and pyritic (6 in. core loss between 1,290 ft. 6 in. and 1,318 ft. 10 in.).
Skalie, swart; effens sanderig in boonste gedeelte; onderste 10 dm. 'n fynkorrelrige sandsteen	3	5	1,322	3	Shale, black; slightly sandy in top portion; bottom 10 in. a fine-grained sandstone.
Matkool, swaar, skalieagtig, plek-plek met koolstofhoudende skalie (kern totaal opgebrokket)	4	4	—	—	Coal, dull, heavy, shaly, with carbonaceous shale in places (core completely broken up).
Steenkool, gemeng; hoofsaaklik matkool; plek-plek skalieagtig; effens piriethoudend (kern totaal opgebrokket)	4	6	—	—	Coal, mixed; mainly dull coal; shaly in parts; slightly pyritic (core completely broken up).
Matkool, swaar, skalieagtig, en koolstofhoudende skalie; baie wryfvlakke (kern totaal opgebrokket en 4 vt. 5 dm. kernverlies tussen 1,322 vt. 3 dm. en 1,339 vt. 5 dm.)	3	11	1,339	5	Coal, dull, heavy, shaly, and carbonaceous shale; many slickensides (core completely broken up and 4 ft. 5 in. core loss between 1,322 ft. 3 in. and 1,339 ft. 5 in.).
Sandsteen, plek-plek koolstofhoudend	2	10	—	—	Sandstone, carbonaceous in parts.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	<i>Vt.</i> <i>Ft.</i>	<i>Dm.</i> <i>In.</i>	<i>Vt.</i> <i>Ft.</i>	<i>Dm.</i> <i>In.</i>	
Steenkool, gemeng.....		11	—		Coal, mixed.
Sandsteen, fynkorrelrig tot grint- agtig, vuilvaal tot swart, plek- plek koolstofhoudend	15	11	—		Sandstone, fine-grained to gritty, dirty grey to black, carbona- ceous in parts.
Matkool en glanskool, skalieagtig in boonste 14 dm.	2	11	—		Coal, dull, and bright coal slightly shaly in top 14 in.
Sandsteen, middelkorrelrig, vuil- vaal	2	3	1,364	3	Sandstone, medium-grained, dirty grey.

BOORGAT 133 : MULA 808 : BOREHOLE 133

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
		<i>Dm.</i> <i>In.</i>	<i>Vt.</i> <i>Ft.</i>	<i>Dm.</i> <i>In.</i>		
U 258	N.G.....	6	1,035	3		N.S.
J	Glanskool, gelaag, taamlik kalsiethoudend	17	—			Coal, bright, banded, fairly calcitic.
	N.G.....	4	—			N.S.
H	Glanskool, gelaag; effens skalieagtig onder; taamlik piriethoudend	16	—			Coal, bright, banded, slightl shaly towards bottom; fairl pyritic.
	N.G.....	4	—			N.S.
G	Glanskool, gelaag; skalieagtig in onderste 3 dm.; taamlik kalsiethoudend; taamlik piriethoudend veral in boonste deel	23	—			Coal, bright, banded, shaly i bottom 3 in.; fairly calcitic fairly pyritic especiall towards top.
	N.G.....	25	—			N.S.
F	Glanskool, gelaag; effens skalieagtig; kalsiet- en piriethoudend met 'n paar skalielae naby onderent	21	1,044	5		Coal, bright, banded, slightl shaly; calcitic and pyritic with a few shale bands nea bottom.
	N.G.....	462	1,082	11		N.S.
	Glanskool, gelaag; effens skalieagtig onder; effens piriethoudend en taamlik kalsiethoudend	11	—			Coal, bright, banded; slightl shaly towards bottom; sligh ly pyritic and fairly calcitic
	N.G.....	4	—			N.S.
E	Glanskool, gelaag; kalsiethou- dend	9	—			Coal, bright, banded, calcitic
	N.G.....	10	—			N.S.

Bg. 133 (very.)

B.H. 133 (contd.)

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth	Nature of strata
D	Glanskool, gelaag, taamlik skalieagtig; kalsiet- en piriethoudend	Dm. In. 16	Vt. Ft. —	Coal, bright, banded, fairly shaly; calcitic and pyritic.
	N.G.....	7	—	N.S.
	Glanskool, gelaag; skalieagtig in onderste gedeelte; kalsiet-houdend en effens piriethoudend	14½	1,088	10½ Coal, bright, banded, shaly in bottom portion; calcitic and slightly pyritic.
	N.G.....	104½	1,097	7 N.S.
C	Glanskool, gelaag, kalsiet- en piriethoudend; skalieagtig in boonste 3 dm. en in onderste 2 dm.	26	—	Coal, bright, banded, calcitic and pyritic; shaly in top 3 in. and in bottom 2 in.
	Skalie, koolstofhoudend.....	1½	—	Shale, carbonaceous.
	Glanskool, gelaag; effens skalieagtig by onderent; 1 dm. skalie 6 dm. van onder af; erg kalsiet- en piriethoudend	15	—	Coal, bright, banded, slightly shaly towards bottom; 1 in. shale 6 in. from bottom; very calcitic and pyritic.
	N.G.....	5½	—	N.S.
B	Glanskool, gelaag, met baie dun skalielagies by bo- en onderent; taamlik kalsiet-houdend en effens piriethoudend	27	—	Coal, bright, banded, with many thin shale bands at top and bottom; fairly calcitic and slightly pyritic.
A	N.G.....	5	—	N.S.
	Glanskool, gelaag; plek-plek erg glansend; met 'n 2 dm. skalieagtige laag naby middel; erg kalsiethoudend bo en erg piriethoudend in middel	43	1,107	10 Coal, bright, banded; very bright in parts; with a 2-in. shaly band near middle; calcitic towards top and very pyritic in middle.
259 E	N.G.....	35	1,110	9 N.S.
	Glanskool, gelaag; skalieagtig in boonste helfte en 1 dm. skalie in middel; taamlik piriethoudend in onderste helfte en kalsiethoudend by bo- en onderent	33	—	Coal, bright, banded; shaly in top half and 1 in. shale in middle; fairly pyritic in bottom half and calcitic at top and bottom.
D	N.G.....	52	1,117	10 N.S.
	Glanskool, gelaag; skalieagtig veral in onderste helfte; kalsiet- en piriethoudend	34	—	Coal, bright, banded; shaly especially in bottom half; calcitic and pyritic.
C	N.G.....	143	—	N.S.
	Glanskool, gelaag; met 1 dm. skalie naby bo-ent; skalieagtig in middel en in boonste 8 dm.; effens piriethoudend en kalsiethoudend	36	—	Coal, bright, banded, with 1 in. shale near top; shaly in middle and in top 8 in.; slightly pyritic and calcitic.
B	N.G.....	82	—	N.S.
	Glanskool, gelaag; met enkele skalielagies veral by bo-ent; kalsiet- en piriethoudend	17½	—	Coal, bright, banded, with occasional shale bands especially towards top; calcitic and pyritic.
	N.G.....	8	—	N.S.
	Glanskool, gelaag; plek-plek skalieagtig	12½	—	Coal, bright, banded, shaly in parts.

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth			Nature of strata
			Dm. In.	Vt. Ft.	Dm. In.	
A	N.G..... Glanskool, gelaag; effens skalieagtig by bo- en onder- ent; kalsiethoudend bo en piriethoudend veral onder	4 44		— 1,149	7	N.S. Coal, bright, banded, slight- ly shaly at top and bottom; calcitic towards top; pyritic especially towards bottom.
U 260 F	N.G..... Matkool, swaar; korrelrig by onderent en effens glansend in boonste deel	1,452 32		1,290 —	6	N.S. Coal, dull, heavy; granular towards bottom and slightly lustrous towards top.
E	Matkool, deurgaans korrelrig en homogeen	52		—		Coal, dull; granular and homo- geneous throughout.
D	N.G..... Matkool, swaar.....	37 26		— —		N.S. Coal, dull, heavy.
C	N.G..... Matkool, korrelrig; met 4 dm. gelaagde glanskool in mid- del; effens kalsiet- en piriethou- dend	28 39		— —		N.S. Coal, dull, granular; with 4 banded, bright coal middle; slightly calcitic pyritic.
B	Steenkool, gemeng; hoofsaak- lik glanskool; 1 dm. skalie 11 dm. van bo af; effens kalsiethoudend en taamlik piriethoudend	42		—		Coal, mixed; mainly bright coal; 1 in. shale 11 in. from top; slightly calcitic fairly pyritic.
A	N.G..... Matkool, plek-plek swaar en skalieagtig; met 'n bietjie glanskool; effens kalsiet- en piriethoudend (6 dm. kernverlies tussen 1,290 vt. 6 dm. en 1,318 vt. 10 dm.)	31 47		— 1,318	10	N.S. Coal, dull; heavy and shaly parts; with a little bright coal; slightly calcitic pyritic (6 in. core between 1,290 ft. 6 in. 1,318 ft. 10 in.).
U 261 C	N.G..... Matkool, swaar, skalieagtig, plek-plek met koolstofhou- dende skalie (kern totaal opgebrokkel)	41 52		1,322 —	3	N.S. Coal, dull, heavy, shaly, carbonaceous shale in places (core completely broken)
B	Steenkool, gemeng; hoofsaak- lik matkool; plek-plek ska- lieagtig; effens piriethou- dend (kern totaal opgebrok- kel)	54		—		Coal, mixed; mainly dull coal shaly in parts; slightly pyritic (core completely broken)
A	Matkool, swaar, skalieagtig, en koolstofhoudende skalie; baie wryfvlakke (kern totaal opgebreek en 4 vt. 5 dm. kernverlies tussen 1,322 vt. 3 dm. en 1,399 vt. 5 dm.)	47		1,339	5	Coal, dull, heavy, shaly, carbonaceous shale; many slickensides (core completely broken up and 4 ft. 5 in. core loss between 1,322 3 in. and 1,339 ft. 5 in.).

BOORGAT 133 : MULA 818 : BOREHOLE 133

ANALISE VAN LUGGEDROOGDE STEENKOOI ANALYSIS OF AIR-DRIED COAL

No. van B.N.I.-monster F.R.I. sample no.	DIKTE (Dm.) THICKNESS (In.)		RU-STEENKOOI RAW COAL						WASTOETS WASHING TEST		DRYSTOF FLOAT						SINK- STOF SINK		
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. C.V. lb./lb.	H ₂ O %	A ₃ Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	Groot- te (Dm.) Size (In.)	S.G.	Op- brengs Yield %	V.W. C.V. lb./lb.	H ₂ O %	A ₃ Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	A ₃ Ash %	%
U 258	J	17	—	—	21.8	—	—	—	— ^{3/16}	1.40	49.7	—	2.5	8.1	40.4	49.0	4	35.4	
	H	16	—	—	24.6	—	—	—	— ^{3/16}	1.40	39.2	—	2.6	9.7	38.2	49.5	4½	34.2	
	G	23	—	—	21.1	—	—	—	— ^{3/16}	1.40	57.7	—	2.8	8.5	37.1	51.6	5	38.2	
	F	21	—	—	22.4	—	—	—	— ^{3/16}	1.40	45.4	—	2.7	9.2	37.8	50.3	4½	33.3	
	E	20	—	—	21.8	—	—	—	— ^{3/16}	1.40	50.2	—	2.6	9.4	37.7	50.3	5	34.3	
	D	30½	—	—	24.3	—	—	—	— ^{3/16}	1.40	43.0	—	2.5	10.1	37.3	50.1	5	35.0	
	C	42½	—	—	20.4	—	—	—	— ^{3/16}	1.40	52.6	—	2.6	8.1	37.3	52.0	5	34.0	
	B	27	—	—	23.6	—	—	—	— ^{3/16}	1.40	46.8	—	2.5	9.0	37.3	51.2	4½	36.4	
	A	43	—	—	18.4	—	—	—	— ^{3/16}	1.40	63.8	—	2.4	8.5	38.5	50.6	5½	35.9	

B.H. 133 (contd.)

Bg. 133 (verv.)

No. van B.N.I.-monster F.R.I. sample no.	Dikte (Dm.) THICKNESS (IN.)		RU-STEENKOOI RAW COAL					WASTOETS WASHING TEST		DRYSTOF FLOAT						SINK- STOP SINK	
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	Groot- te (Dm.) Size (In.)	Op- brengs Yield %	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	As Ash %
U 259	E	—	33	—	21.4	—	—	—	— ^{3/16}	52.2	—	2.7	8.7	37.9	50.7	4	35.3
	D	52	34	—	27.2	—	—	—	— ^{3/16}	37.0	—	2.8	9.1	36.7	51.4	5½	37.8
	C	135	36	—	30.3	28.8	39.0	1½	— ^{3/16}	29.7	—	—	—	—	—	—	—
	B	82	30	—	26.5	—	—	—	— ^{3/16}	47.2	—	2.4	9.0	37.6	51.0	4½	42.2
U 260	A	84	44	—	19.5	—	—	—	— ^{3/16}	60.6	—	2.1	8.5	37.3	52.1	5½	36.4
	F	1,691	32	—	28.2	21.7	47.8	—	—1	40.3	—	—	—	—	—	—	—
	E	—	52	—	19.6	—	—	—	—1	69.4	12.0	3.0	13.7	20.3	63.0	F	32.9
	D	37	26	—	28.5	17.8	51.4	—	—1	43.1	—	—	—	—	—	—	—
..	C	28	39	—	23.1	—	—	—	—1	67.6	11.7	2.5	16.7	21.6	59.2	F	36.3
	B	—	42	—	20.7	—	—	—	—1	64.4	13.1	2.7	9.7	28.1	59.5	1Ag	40.6
	A	31	47	—	26.5	23.1	48.4	—	—1	48.5	—	—	—	—	—	—	—
	C	41	52	—	39.2	24.5	34.9	—	—1	24.2	—	—	—	—	—	—	—
U 261	B	—	54	—	24.4	—	—	—	—1	58.7	12.7	2.2	11.8	26.0	60.0	1Ag	42.4
	A	—	47	—	41.0	19.4	38.3	—	—1	30.4	—	—	—	—	—	—	—

BOORGAT 134 : KLIPFONTEIN 535 : BOREHOLE 134

Kern 3½ dm.

Core 3½ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	<i>Vt.</i> <i> Ft.</i>	<i>Dm.</i> <i> In.</i>	<i>Vt.</i> <i> Ft.</i>	<i>Dm.</i> <i> In.</i>	
Sand en grond.....	8	6	8	6	Sand and soil.
Moddersteen, ligvaal.....	21	3	29	9	Mudstone, light grey.
Moddersteen, ligvaal, plek-plek met kwartskorrels	14	0	—		Mudstone, light grey, with quartz grains in places.
Moddersteen, vaalgeel.....	2	9	—		Mudstone, grey-yellow.
Moddersteen, rooibruin, erg yster- ryk, met heelwat kwartskorrels	3	11	51	0	Mudstone, red-brown, very ferru- ginous, with many quartz grains.
Graniet, erg verweer en plek-plek skisagtig	66	0	117	0	Granite, much weathered and schistose in parts.

BOORGAT 135 : BITTERFONTEIN 537 : BOREHOLE 135

Kern 3½ dm.

Core 3½ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sand en grond.....	20	0	20	0	Sand and soil.
Sandsteen, wit, plek-plek gelaag (Holkranssandsteen)	142	6	162	6	Sandstone, white, bedded in part (Cave Sandstone).
Sandsteen en slijksteen, ligbruin, plek-plek wit gevlek (Rooilae)	326	2	488	8	Sandstone and Siltstone, light brown, stained white in part (Red Beds).
Sliksteen, ligbruin, merrelagtig, plek - plek met grofkorrelrige sandsteendele; plek-plek met halfgeronde kwartskorrels tot ¾ dm. in deursnee	14	10	—	—	Siltstone, light brown, marly, with coarse-grained portions of sand- stone; partly rounded quartz grains up to ¾ in. in diameter in places.
Sandsteen, middelkorrelrig, wit tot vaal, met enkele groot kwarts- korrels	2	8	—	—	Sandstone, medium-grained, white to grey, with occasional large quartz grains.
Grintsteen, persagtig.....	1	3	—	—	Grit, purplish.
Sandsteen, wit, veldspaties, fyn- korrelrig tot erg grintagtig (Moltenolae)	26	10	534	3	Sandstone, white, felspathic, fine- grained to very gritty (Molten- Beds).
Moddersteen; boonste helfte pers- agtig, onderste helfte vaal tot donkervaal	145	5	679	8	Mudstone; top half purplish bottom half grey to dark grey
Skalie.....	—	2½	679	10½	Shale.
Glanskool, gelaag, taamlik piriethou- dend, effens kalsiethoudend	1	5½	—	—	Coal, bright, banded, fairly pyritic, slightly calcitic.
Skalie.....	—	4	—	—	Shale.
Glanskool, gelaag, effens kalsiethou- dend, taamlik piriethoudend	1	0	—	—	Coal, bright, banded, slightly calcitic, fairly pyritic.
Skalie.....	—	6	—	—	Shale.
Glanskool, gelaag, effens piriethou- dend, plek-plek effens skalie- agtig	1	10	—	—	Coal, bright, banded, slightly pyritic, slightly shaly in part
Skalie.....	2	0	—	—	Shale.
Glanskool, gelaag; erg skalieagtig in boonste 3 dm. en in onderste 1 dm.; erg kalsiet- en piriethou- houdend	1	7	—	—	Coal, bright, banded; very shaly in top 3 in. and in bottom 1 in. very calcitic and pyritic.
Skalie, swart en donkervaal; met gemengde steenkool en skalie in onderste helfte	19	4	—	—	Shale, black and dark grey; with mixed coal and shale in bottom half.
Steenkool.....	—	11	—	—	Coal.
Skalie en steenkool, intiem ge- meng, met breë skalielae	16	7	—	—	Shale and coal, intimately mixed with broad shale bands.
Glanskool, gelaag, erg skalieagtig	2	9	728	2	Coal, bright, banded, very shaly
Skalie met vyf dun steenkoolagies	8	4	736	6	Shale with five thin coal-bands
Glanskool, met 3 dm. skalie in middel; skalieagtig bo; enkele wryfvlakke	3	5	—	—	Coal, bright, with 3 in. shale middle; shaly towards top with occasional slickensides.
Skalie met 'n wryfvlak in middel.	—	7	—	—	Shale with a slickenside in middle
Glanskool, gelaag; met 3 dm. skalie 15 dm. van onder af; effens piriethoudend	3	3	—	—	Coal, bright, banded; with 3 in. shale 15 in. from bottom slightly pyritic.
Skalie.....	—	11	—	—	Shale.
Glanskool, gelaag.....	1	2	745	10	Coal, bright, banded.
Skalie met 12 dm. steenkool naby bo-ent	7	2	—	—	Shale with 12 in. coal near top
Glanskool, gelaag; effens skalie- agtig in middel; wryfvlak in middel	2	1	—	—	Coal, bright, banded; slightly shaly in middle; slickensides middle.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Skalie.....	2	9	—	—	Shale.
Steenkool met gemengde steenkool en skalie in boonste 6 dm.; erg piriethoudend	1	6	—	—	Coal, bright, with mixed coal and shale in top 6 in.; very pyritic.
Skalie.....	1	5	—	—	Shale.
Steenkool, gelaag; met 2 dm. skaliegelaag by onderent		11	—	—	Coal, bright, banded; with 2 in. shale at bottom.
Skalie.....		2½	—	—	Shale.
Steenkool, gelaag; skalieagtig in onderste helfte; effens piriethoudend	1	3½	763	2	Coal, bright, banded; shaly in bottom half; slightly pyritic.
Skalie met 12 dm. steenkool in middel en baie wryfvlakke in onderste helfte	7	7	770	9	Shale with 12 in. coal in middle and many slickensides in bottom half.
Steenkool, gelaag; met baie dun skaliegelaag veral in onderste tweederdes; piriethoudend	3	10	—	—	Coal, bright, banded; with many thin shale bands especially in bottom two-thirds; pyritic.
Skalie met baie wryfvlakke in boonste helfte	2	4	—	—	Shale with many slickensides in top half.
Steenkool en skalie, met enkele wryfvlakke	1	1	—	—	Coal, bright, and shale, with occasional slickensides.
Skalie met drie 8 dm. steenkool- lagies; onderste helfte is opge- brokkel deur wryfvlakke	6	0	784	0	Shale with three 8-in. coal-bands; bottom half is cut up by slickensides.
Steenkool, gelaag, effens skalie- agtig; met 6 dm. erg skalieagtige steenkool 10 dm. van onder af; erg piriethoudend (2 dm. kern- verlies)	2	10	787	0	Coal, bright, banded, slightly shaly; with 6 in. very shaly coal 10 in. from bottom; very pyritic (2 in. core loss).
Skalie met verspreide kwarts- korrels in boonste 9 dm.	2	9	—	—	Shale with scattered quartz grains in top 9 in.
Steenkool, gelaag, effens skalie- agtig; 5 dm. skalie met steen- koolagtige 14 dm. van bo af	2	9	792	6	Coal, bright, banded, slightly shaly; 5 in. shale with coal- stringers 14 in. from top.
Skalie, swart, met enkele dun steenkoolagies	8	4	—	—	Shale, black, with occasional thin coal-layers.
Skalie met verspreide kwartskor- rels	3	9	—	—	Shale with scattered quartz grains.
Skalie met 'n bietjie gemengde steenkool en skalie in onderste 2 vt.	16	8	—	—	Shale with a little mixed coal and shale in bottom 2 ft.
Skalie met baie groot kwarts- korrels, enkele tot ½ dm. in deursnee	9	2	—	—	Shale with many large quartz grains, some up to ½ in. in diameter.
Skalie, koolstofhoudend, met enkele steenkoolagies en baie wryfvlakke	9	11	—	—	Shale, carbonaceous, with an occasional coal-band and many slickensides.
Steenkool, gemeng, en skalie; piriethoudend en met heelwat wryfvlakke	2	3	—	—	Coal, mixed, and shale; pyritic and with many slickensides.
Skalie, koolstofhoudend, plek-plek steenkoolagtig in middel; onder- ste 18 dm. bevat verspreide kwartskorrels	6	4	848	11	Shale, carbonaceous, coaly in parts in middle; bottom 18 in. contains scattered quartz grains.
Sandsteen, kleierig, vaalbruin tot swart; kwartskorrels halfgerond en tot ¼ dm. deursnee	9	7	—	—	Sandstone, clayey, grey-brown to black; quartz grains are semi- rounded and up to ¼ in. in diameter.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sandsteen, ligvaal, fynkorrelrig tot grintagtig; fynkorrelrige dele bevat plek-plek enkele groot kwartskorrels	18	1	—	—	Sandstone, light grey, fine-grained to gritty; fine-grained portions contain some large quartz grains in parts.
Kleiskalie, vaalbruin tot donker-vaal met 'n wryfvlak naby onderent	6	5	—	—	Clay-shale, grey-brown to dark grey with a slickenside near bottom.
Sandsteen, vaalbruin tot swart in onderste helfte; kwartskorrels tot $\frac{3}{4}$ dm. in deursnee (lyk soos moddersteen met 'n groot aantal kwartskorrels daarin)	65	1	—	—	Sandstone, grey-brown to black in bottom half, clayey; quartz grains up to $\frac{3}{4}$ in. in diameter (resembles mudstone with large number of quartz grains in it).
Skalie met 'n bietjie glanskool...	1	3	—	—	Shale with some bright coal.
Sandsteen, vaalbruin tot swart, kleierig; kwartskorrels tot $\frac{3}{4}$ dm. in deursnee (lyk soos moddersteen met 'n groot aantal kwartskorrels daarin)	11	6	960	10	Sandstone, grey-brown to black, clayey; quartz grains up to $\frac{3}{4}$ in. in diameter (resembles mudstone with a large number of quartz grains in it).
Steenkool, skalieagtig, steenkoolagtige skalie en skalie, met baie wryfvlakke	5	10	966	8	Coal, shaly, coaly shale and shale with many slickensides.
Moddersteen, vaalbruin tot swart, met baie kwartskorrels en enkele skalielagies en skalieagtige steenkoolagies	6	8	—	—	Mudstone, grey-brown to black, with many quartz grains and occasional thin shale bands and shaly coal-bands.
Skalie, steenkoolagtig.....	2	3	—	—	Shale, coaly.
Kleiskalie, swart, met baie kwartskorrels, enkele dun koolstofhoudende skalielagies en tweenden-dertig 1 dm. tot 6 dm. steenkoolagies	44	2	1,019	9	Clay-shale, black, with many quartz grains, an occasional thin carbonaceous shale band and thirty-two 1-in. to 6-in. coal-bands.
Sandsteen, skalieagtig, met steenkoolagies	11	3	1,031	0	Sandstone, shaly, with coal-bands.
Steenkool, skalieagtig.....	2	0	1,033	0	Coal, shaly.
Sandsteen, skalieagtig.....	7	0	1,040	0	Sandstone, shaly.
Graniet.....	9	0	1,049	0	Granite.

Vanaf die diepte 1,019 vt. 9 dm. is die kern deur die boorman beskrywe.

From the depth of 1,019 ft. 9 in. the core was described by the driller.

BOORGAT 135 : BITTERFONTEIN 537 : BOREHOLE 135

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
		Dm. In.	Vt. Ft.	Dm. In.	
262	N.G.....	2½	679	10½	N.S.
	Glanskool, gelaag, taamlik piriethoudend, effens kal- siethoudend	17½	—	—	Coal, bright, banded, fairly pyritic, slightly calcitic.
D	N.G.....	4	—	—	N.S.
	Glanskool, gelaag, effens kalsiethoudend, taamlik piriethoudend	12	—	—	Coal, bright, banded, slightly calcitic, fairly pyritic.
C	N.G.....	6	—	—	N.S.
	Glanskool, gelaag, effens piriethoudend, plek - plek effens skalieagtig	22	—	—	Coal, bright, banded, slightly pyritic, slightly shaly in parts.
B	N.G.....	24	—	—	N.S.
	Glanskool, gelaag; erg skalie- agtig in boonste 3 dm. en in onderste 1 dm.; erg piriet- en kalsiethoudend	19	—	—	Coal, bright, banded; very shaly in top 3 in. and in bottom 1 in.; very pyritic and calcitic.
	N.G.....	232	—	—	N.S.
	N.G.....	11	—	—	N.S.
	N.G.....	199	—	—	N.S.
A	Glanskool, gelaag, erg skalie- agtig	33	728	2	Coal, bright, banded, very shaly.
263	N.G.....	100	736	6	N.S.
E	Glanskool met 3 dm. skalie in middel; skalieagtig bo; enkele wryfvlakke	41	—	—	Coal, bright, with 3 in. shale in middle; shaly towards top; occasional slickensides.
D	N.G.....	7	—	—	N.S.
	Glanskool, gelaag; met 3 dm. skalie 15 dm. van onder af; effens piriethoudend	39	—	—	Coal, bright, banded; with 3 in. shale 15 in. from bottom; slightly pyritic.
	N.G.....	11	—	—	N.S.
C	Glanskool, gelaag.....	14	745	10	Coal, bright, banded.
	N.G.....	86	—	—	N.S.
B	Glanskool, gelaag; effens skalieagtig in middel; wryf- vlak in middel	25	—	—	Coal, bright, banded; slightly shaly in middle; slickenside in middle.
	N.G.....	68	—	—	N.S.
	Glanskool, gelaag; met 2 dm. skalie by onderent	11	—	—	Coal, bright, banded; with 2 in. shale at bottom.
A	N.G.....	2½	—	—	N.S.
	Glanskool, gelaag; skalieagtig in onderste helfte; effens piriethoudend	15½	763	2	Coal, bright, banded; shaly in bottom half; slightly pyritic.
264	N.G.....	91	770	9	N.S.
C	Glanskool, gelaag; met baie dun skalielagies veral in onderste tweederdes; piriet- houdend	46	—	—	Coal, bright, banded; with many thin shale bands espe- cially in bottom two-thirds; pyritic.
	N.G.....	113	—	—	N.S.

Bg. 135 (verv.)

B.H. 135 (contd.)

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth	Nature of strata
B	Glanskool, gelaag, effens skalieagtig; met 6 dm. erg skalieagtige steenkool 10 dm. van onder af; erg piriethoudend (2 dm. kern- verlies)	Dm. In. 34	Vt. Ft. —	Coal, bright, banded, slight- ly shaly; with 6 in. very sh. coal 10 in. from bottom very pyritic (2 in. core lost)
A	N.G..... Glanskool, gelaag, effens skalieagtig; 5 dm. skalie met steenkoolaartjies 14 dm. van bo af uitgesluit	33 33	— 792 6	N.S. Coal, bright, banded, slight- ly shaly; 5 in. shale with co- al stringers 14 in. from top excluded.

BOORGAT 135 : BITTERFONTEIN 537 : BOREHOLE 135

ANALYSE VAN LUGGEDROEGDE STEENKOOI

ANALYSIS OF AIR-DRIED COAL

No. van B.N.I.-monster F.R.I. sample no.	Dikte (Dm.) Thickness (In.)		Ru-steenkool Raw Coal						Wastoots Washing Test		Drystof Float						Sink- stof Sink		
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	Groot- te (Dm.) Size (In.)	S.G.	Op- brengs Yield %	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	As %	Ash %
U 262	4	29½	—	—	26.1	—	—	—	— ^{3/16}	1.40	35.8	—	1.7	9.8	40.6	47.9	3½	35.2	
	6	22	—	—	21.9	—	—	—	— ^{3/16}	1.40	47.2	—	2.0	10.1	36.8	51.1	3½	32.4	
	24	19	—	—	28.7	—	—	—	— ^{3/16}	1.40	38.3	—	2.1	9.7	37.6	50.6	3½	40.5	
	442	33	—	—	22.5	—	—	—	— ^{3/16}	1.40	49.9	—	1.9	9.3	37.1	51.7	4½	35.7	
U 263	100	41	—	—	29.7	—	—	—	— ^{3/16}	1.40	43.0	—	1.9	8.4	36.3	53.4	5	45.8	
	7	39	—	—	21.4	—	—	—	— ^{3/16}	1.40	62.3	—	2.0	9.8	37.1	51.1	4	40.5	
	11	14	—	—	16.1	—	—	—	— ^{3/16}	1.40	73.2	—	1.6	10.0	40.0	48.4	4	32.8	
	86	25	—	—	19.4	—	—	—	— ^{3/16}	1.40	61.7	—	1.7	10.4	38.0	49.9	4	33.9	
U 264	68	26½	—	—	22.2	—	—	—	— ^{3/16}	1.40	54.0	—	1.8	8.7	36.4	53.1	4½	38.0	
	2½	91	—	—	30.2	—	—	—	— ^{3/16}	1.40	34.2	—	1.6	8.7	37.0	52.7	4½	41.4	
	113	46	—	1.2	32.6	30.9	35.3	2½	— ^{3/16}	1.40	26.8	—	—	—	—	—	—	—	
	33	34	—	—	22.8	—	—	—	— ^{3/16}	1.40	51.1	—	1.6	10.5	36.7	51.2	5	35.7	

BOORGAT 136 : WELTEVREDEN 405 : BOREHOLE 136

Kern 3½ dm.

Core 3½ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Oppervlakkalksteen en onsuier kieselgoer	10	0	10	0	Surface - limestone and impur kieselguhr.
Sand en gruis.....	60	0	70	0	Sand and gravel.
Sandsteen, erg fynkorrelrig, en sliksteen; hoofsaaklik ligrooi; onderste 30 vt. bevat verspreide kwartskorrels tot 1 mm. in deur- snee (Rooilae)	279	9	349	9	Sandstone, very fine-grained, and siltstone; mainly light pink bottom 30 ft. contains scattered quartz grains up to 1 mm. in diameter (Red Beds).
Sandsteen, fynkorrelrig tot grint- agtig, persagtig tot bruin; plek- plek veldspaties en met ver- spreide spoelklippies (Molteno- lae)	29	3	379	0	Sandstone, fine-grained to gritty purplish to brown; felspathic in parts and with scattered pebbles (Molteno Beds).
Moddersteen, bruin tot ligvaal, met pers dele in middel en swart, skalieagtig by onderent	272	10	651	10	Mudstone, brown to light grey with purple parts towards middle and black shaly at bottom.
Glanskool, gelaag, plek-plek vitriet- agtig	1	10	—	—	Coal, bright, banded, vitrainous in parts.
Skalie, koolstofhoudend, met 'n paar steenkoolstrepies	—	7	—	—	Shale, carbonaceous, with a few coal-streaks.
Glanskool, gelaag, plek-plek skalie- agtig veral by onderent; piriet- en kalsiethoudend	1	2	—	—	Coal, bright, banded; shaly in parts especially towards bottom pyritic and calcitic.
Skalie.....	—	3	—	—	Shale.
Glanskool, gelaag; met 'n paar dun skalielagies by bo-ent; piriet- en effens kalsiethoudend	1	11	—	—	Coal, bright, banded; with a few thin shale bands at top; pyritic and slightly calcitic.
Skalie.....	2	2	659	9	Shale.
Glanskool, gelaag; met skalie- lagies; piriet- en kalsiethoudend	1	7	—	—	Coal, bright, banded; with shaly bands; pyritic and calcitic.
Skalie, swart.....	14	4	—	—	Shale, black.
Glanskool, gelaag.....	1	4	—	—	Coal, bright, banded.
Skalie met skalieagtige steenkool- lae	18	3	—	—	Shale with shaly coal-bands.
Skalie en glanskool, intiem gemeng	5	8	—	—	Shale and bright coal, intimately mixed.
Skalie.....	1	3	702	2	Shale.
Glanskool, gelaag; taamlik skalie- agtig in boonste helfte en bevat 'n paar dun kalielagies in on- derste helfte; kalsiethoudend	3	0	—	—	Coal, bright, banded; fairly shaly in top half and contain- a few thin shale bands in bottom half; calcitic.
Skalie met 9 dm. steenkool in middel	1	10	—	—	Shale with 9 in. coal in middle.
Glanskool, gelaag, piriet- en kal- siethoudend, met boonste 1 dm. skalieagtig	1	8	—	—	Coal, bright, banded, pyritic and calcitic, with top 1 in. shaly.
Skalie.....	—	7	—	—	Shale.
Glanskool, gelaag; skalieagtig in onderste 10 dm.; kalsiethoudend en effens piriethoudend	2	2	711	5	Coal, bright, banded; shaly in bottom 10 in., calcitic and slightly pyritic.
Skalie met enkele steenkoolagies	8	7	720	0	Shale with occasional coal-bands.
Glanskool, gelaag; boonste 8 dm. skalieagtig, met 1½ dm. skalie 8 dm. van bo af; taamlik piriet- en kalsiethoudend	4	4	—	—	Coal, bright, banded; top 8 in. shaly, with 1½ in. shale 8 in. from top; fairly pyritic and calcitic.
Skalie, koolstofhoudend.....	—	7	—	—	Shale, carbonaceous.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
anskool, gelaag; skalieagtig in boonste en onderste gedeeltes; kalsiethoudend	2	2	—	—	Coal, bright, banded; shaly in top and bottom portions; calcitic.
alie, koolstofhoudend.....		5	—	—	Shale, carbonaceous.
anskool, gelaag; vitrietagtig; piriët- en kalsiethoudend in onderste 10 dm.	1	9	729	4	Coal, bright, banded, vitrainous; pyritic and calcitic in bottom 10 in.
alie met 12 dm. steenkool naby bo-ent	6	3	—	—	Shale with 12 in. coal near top.
anskool, gelaag; met twee 1 dm. skalielagies in boonste helfte; onderste 8 dm. bevat siderietkorrels; kalsiethoudend en effens piriethoudend	3	3	—	—	Coal, bright, banded; with two 1-in. shale bands in top half; bottom 8 in. contains siderite pellets; calcitic and slightly pyritic.
enskool en skalie, erg sideriethoudend en piriethoudend	1	3	740	1	Coal and shale, very sideritic.
alie met drie 11 dm. steenkoollagies	11	0	751	1	Shale with three 11-in coal-bands.
anskool, gelaag; met baie dun skalielagies	2	0	—	—	Coal, bright, banded; with many thin shale bands.
anskool, gelaag; plek-plek effens skalieagtig; kalsiet- en piriethoudend	2	5	—	—	Coal, bright, banded; slightly shaly in parts; calcitic and pyritic.
anskool, gelaag; plek-plek skalieagtig; piriethoudend bo en onder en sideriethoudend in onderste 3 dm.	2	7	758	1	Coal, bright, banded; shaly in parts; pyritic towards top and bottom and sideritic in bottom 3 in.
enskool, erg sideriet- en piriethoudend		8	—	—	Coal, very sideritic and pyritic.
alie met 10 dm. sanderige skalie in sandsteen	13	9	772	6	Shale, with 10 in. sandy shale and sandstone.
anskool, gelaag; met baie dun skalielagies; piriethoudend by bo- en onderent	1	4	—	—	Coal, bright, banded; with many thin shale bands; pyritic at top and bottom.
alie, vaal en vaalswart.....	27	7	801	5	Shale, grey and grey-black.
anskool, gelaag; met baie dun skalieagtige lagies; piriethoudend in boonste helfte; kalsiethoudend	3	4	—	—	Coal, bright, banded; with many thin shaly bands; pyritic in top half; calcitic.
alie met dun steenkoollagies en plek-plek met sanderige lagies	39	7	844	4	Shale with thin coal-bands and with sandy bands in parts.
nskool, korrelrig, skalieagtig...	2	5	—	—	Coal, dull, granular, shaly.
nskool, glansend, met baie wryfvlakke; 13 dm. glanskool 23 dm. van bo af; onderste 12 dm. skalieagtig	3	6	850	3	Coal, dull, lustrous, with many slickensides; 13 in. bright coal 23 in. from top; bottom 12 in. shaly.
alie met steenkoollagies in boonste helfte en vaal lagies in onderste helfte	45	9	896	0	Shale with coal-bands in top half and grey bands in bottom half.
nskool, korrelrig, erg homogeen; net 'n 7 dm. piriethoudende laag 8 dm. van onder af; taamlik piriethoudend	6	2	—	—	Coal, dull, granular, very homogeneous; with a 7-in. pyritic band 48 in. from bottom; fairly pyritic.
alie, koolstofhoudend.....	1	2	—	—	Shale, carbonaceous.
nskool, erg skalieagtig.....	2	5	—	—	Coal, dull, very shaly.
nskool, glansend.....	3	0	—	—	Coal, dull, lustrous.
enskool, gemeng; met enkele gelaagde glanskoollagies; baie wryfvlakke	4	4	—	—	Coal, mixed; with occasional banded bright coal-bands; many slickensides.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Glanskool, gelaag; effens kalsiet- houdend; met enkele matkool- lagies by bo-ent; baie wryfvlakke in boonste gedeelte	3	9	916	10	Coal, bright, banded; slightly calcitic; with occasional coal-bands at top; many slick sides in top portion.
Sandsteen	2	2	919	0	Sandstone.
Skalielae, breed, en breë koolstof- houdende skalielae en skalie- agtige steenkoollae	9	3	—		Shale bands, broad, and b bands of carbonaceous and shaly coal.
Sandsteen	18	4	946	7	Sandstone.
Matkool met twee dun skalieagtige steenkoollagies naby bo-ent; erg kalsiethoudend onder	2	7	949	2	Coal, dull; with two thin coal-bands near top; very tic towards bottom.
Sandsteen	4	6	953	7	Sandstone.

Vanaf die diepte van 751 vt. 1 dm. is die
ongemonsterde gedeeltes van die kern deur die
boorman beskrywe.

The unsampled portions of the core b
the depth of 751 ft. 1 in. have been desc
by the driller.

BOORGAT 136 : WELTEVREDEN 405 : BOREHOLE 136

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth	Nature of strata
		Dm. In.	Vt. Ft. Dm. In.	
U 356	N.G. (Moddersteen).....	—	651 10	N.S. (Mudstone).
	Glanskool, gelaag, plek-plek vitrietagtig	22	—	Coal, bright, banded; vitrai- nous in parts.
	N.G.....	7	—	N.S.
E	Glanskool, gelaag, plek-plek skalieagtig veral by onder- ent; piriet- en kalsiethou- dend	14	—	Coal, bright, banded; shaly in parts especially towards bot- tom; pyritic and calcitic.
	N.G.....	3	—	N.S.
	Glanskool, gelaag; met 'n paar dun skalielagies by bo-ent; piriet- en effens kalsiethou- dend	23	—	Coal, bright, banded; with a few thin shale bands at top; pyritic and slightly calcitic.
	N.G.....	26	659 9	N.S.
D	Glanskool, gelaag; met skalie- lagies; piriet- en kalsiet- houdend	19	—	Coal, bright banded; with shale bands; pyritic and calcitic.
	N.G.....	490	702 3	N.S.
C	Glanskool, gelaag; taamlik skalieagtig in boonste helfte en bevat 'n paar dun skalie- lagies in onderste helfte; kalsiethoudend	36	—	Coal, bright, banded; fairly shaly in top half and con- tains a few thin shale bands in bottom half; calcitic.
	N.G.....	22	—	N.S.
B	Glanskool, gelaag; piriet- en kalsiethoudend met boonste 1 dm. skalieagtig	20	—	Coal, bright, banded, pyritic and calcitic, with top 1 in. shaly.
	N.G.....	7	—	N.S.
A	Glanskool, gelaag; skalieagtig in onderste 10 dm.; kalsiet- houdend en effens piriet- houdend	26	711 5	Coal, bright, banded; shaly in bottom 10 in.; calcitic and slightly pyritic.
U 357	N.G.....	103	720 0	N.S.
G	Glanskool, gelaag; boonste 8 dm. skalieagtig, met 1½ dm. skalie 8 dm. van bo af; taamlik piriet- en kalsiet- houdend	52	—	Coal, bright, banded; top 8 in. shaly, with 1½ in. shale 8 in. from top; fairly pyritic and calcitic.
	N.G.....	7	—	N.S.
F	Glanskool, gelaag; skalieagtig in boonste en onderste ge- deeltes; kalsiethoudend	26	—	Coal, bright, banded; shaly in top and bottom portions; calcitic.
	N.G.....	5	—	N.S.
E	Glanskool, gelaag, vitrietagtig; piriet- en kalsiethoudend in onderste 10 dm.	21	729 4	Coal, bright, banded, vitrai- nous; pyritic and calcitic in bottom 10 in.
	N.G.....	75	—	N.S.
D	Glanskool, gelaag; met twee 1 dm. skalielagies in boon- ste helfte; onderste 8 dm. bevat siderietkorrels; kal- siethoudend en effens piriet- houdend	39	—	Coal, bright, banded; with two 1-in. shale bands in top half; bottom 8 in. contains siderite pellets; calcitic and slightly pyritic.
	N.G.....	135	751 1	N.S.

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verky Thickness recorded	Ware diepte True depth		Nature of strata
		Dm. In.	Vt. Ft.	Dm. In.	
C	Glanskool, gelaag; met baie dun skalielagies	24	—	—	Coal, bright, banded; w many thin shale bands.
B	Glanskool, gelaag, plek-plek effens skalieagtig; kalsiet- en piriethoudend	29	—	—	Coal, bright, banded, sligh shaly in parts; calcitic a pyritic.
A	Glanskool, gelaag; plek-plek skalieagtig; piriethoudend bo en onder en sideriethou- dend in onderste 3 dm.	31	758	1	Coal, bright, banded; shaly parts; pyritic towards t and bottom and sideritic bottom 3 in.
U 539	N.G.....	165	772	6	N.S.
D	Glanskool, gelaag; met baie dun skalielagies; piriethou- dend by bo- en onderent	16	—	—	Coal, bright, banded; w many thin shale band pyritic at top and bottom.
C	N.G.....	331	801	5	N.S.
	Glanskool, gelaag; met baie dun skalieagtige lagies; piriethoudend in boonste helfte; kalsiethoudend	40	—	—	Coal, bright, banded; w many thin shale band pyritic in top half; calcit
B	N.G.....	475	844	4	N.S.
A	Matkool, korrelrig, skalieagtig	29	—	—	Coal, dull, granular, shaly.
	Matkool, glansend, met baie wryfvlakke; 13 dm. glans- kool 23 dm. van bo af; onderste 12 dm. skalieagtig	42	850	3	Coal, dull, lustrous, with ma slickensides; 13 in. brig coal 23 in. from top; botto 12 in. shaly.
U 540	N.G.....	549	896	0	N.S.
F	Matkool, korrelrig, erg homo- geen; met 'n 7-dm. piriethou- dende laag 48 dm. van onder af; taamlik piriethou- dend	74	—	—	Coal, dull, granular, ve homogeneous; with a 7- pyritic band 48 in. fro bottom; fairly pyritic.
E	N.G.....	14	—	—	N.S.
D	Matkool, erg skalieagtig.....	29	—	—	Coal, dull, very shaly.
C	Matkool, glansend.....	36	—	—	Coal, dull, lustrous.
	Steenkool, gemeng; met enkele gelaagde glanskoollagies; baie wryfvlakke	52	—	—	Coal, mixed; with occasio banded bright coal-band many slickensides.
B	Glanskool, gelaag, effens kal- siethoudend; met enkele matkoollagies by bo-ent; baie wryfvlakke in boonste gedeelte	45	916	0	Coal, bright, banded, sligh calcitic; with occasional d coal-bands at top; ma slickensides in top portio
A	N.G.....	357	946	7	N.S.
	Matkool met twee dun skalie- agtige steenkoollagies naby bo-ent; erg kalsiethoudend onder	31	949	2	Coal, dull; with two thin sh coal-bands near top; v calcitic towards bottom.

Bg. 136 (verv.)

B.H. 136 (contd.)

No. van B.N.I.-monster F.R.I. sample no.	Dikte (Dm.) THICKNESS (IN.)		RU-STEENKOOI RAW COAL						WASTOETS WASHING TEST		DRYSTOF FLOAT						SINK- STOF SINK																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	Groot- te (Dm.) Size (in.)	S.G.	Op- brengs Yield %	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	As Ash %																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							

* Bereken / Calculated.

BOORGAT 137 : BARBOSA 1241 : BOREHOLE 137

Kern 3½ dm.

Core 3½ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sand en grond.....	18	6	18	6	Sand and soil.
Sliksteen en erg fynkorrelrige sandsteen; hoofsaaklik ligrooi; slegs enkele kalkhoudende knolle; onderste 4 vt. bevat verspreide kwartskorrels (Rooilae)	205	0	223	6	Siltstone and very fine-grained sandstone; mainly pink; only an occasional calcareous nodule; bottom 4 ft. contains scattered quartz grains (Red Beds).
Sandsteen en grintsteen, persbruin sandsteen, besonder massief en homogeen, middelkorrelrig, veldspaties, wit; plek-plek grintagtig in onderste 10 vt. (Moltenolae)	3 42	5 9	— 269	— 8	Sandstone and grit, purple-brown. Sandstone, rather massive and homogeneous, medium-grained, felspathic, white; gritty in parts in bottom 10 ft. (Molteno Beds).
Moddersteen, persagtig, met vaal dele; onderste 35 vt. vaal tot donkervaal, en swart na onder	134	7	404	3	Mudstone, purplish, with grey portions; bottom 35 ft. is grey to dark grey, and black towards bottom.
Skalie en steenkool, intiem gemeng		9	405	0	Shale and coal, intimately mixed.
Glanskool, gelaag; piriethoudend; met onderste 2½ dm. erg skalieagtig	2	0	—	—	Coal, bright, finely banded, pyritic; with bottom 2½ in. very shaly.
Skalie.....		3½	—	—	Shale.
Glanskool, fyngelaag, effens piriethoudend	1	4	—	—	Coal, bright, laminated, slightly pyritic.
Skalie.....		5½	—	—	Shale.
Glanskool, fyngelaag.....	1	10	410	11	Coal, bright, laminated.
Skalie.....	2	1	—	—	Shale.
Glanskool, fyngelaag.....	1	10	—	—	Coal, bright, laminated.
Skalie, donkervaal tot swart.....	14	2	—	—	Shale, dark grey to black.
Glanskool, fyngelaag.....	1	10	—	—	Coal, bright, laminated.
Skalie en steenkool, gemeng.....	6	1	—	—	Shale and coal, mixed.
Skalie.....	2	0	—	—	Shale.
Skalie en steenkool, gemeng en erg piriethoudend	2	6	—	—	Shale and coal, mixed and very pyritic.
Skalie met enkele steenkoollagies.	5	10	—	—	Shale with occasional coal-bands.
Glanskool, gelaag; met baie dun skalielagies; 7 dm. skalie 18 dm. van bo af	2	10	450	1	Coal, bright, banded; with many thin shale bands; 7 in. shale 18 in. from top.
Skalie met enkele steenkoollagies.	11	8	461	9	Shale with occasional coal-bands.
Glanskool, erg fyngelaag.....	1	9	—	—	Coal, bright, finely laminated.
Skalie.....		11	—	—	Shale.
Glanskool, gelaag; met baie dun skalielagies, 2 dm. skalie 24 dm. van bo af, onderste 2 dm. skalieagtig;	3	7	468	0	Coal, bright, banded; with many thin shale bands, 2 in. shaly 24 in. from top, bottom 2 in. shaly.
Skalie met 'n bietjie glanskool en baie wryfvlakke	9	0	—	—	Shale with a little bright coal and many slickensides.
Glanskool, gelaag; en skalie.....	1	4	478	4	Coal, bright, banded; and shale.
Glanskool, gelaag, effens skalieagtig en kalsiethoudend	2	2	—	—	Coal, bright, banded, slightly shaly and calcitic.
Skalie met baie wryfvlakke.....	4	0	—	—	Shale with many slickensides.
Skalie en steenkool, intiem gemeng, met breë skalielae	8	4	—	—	Shale and coal, intimately mixed; with broad shale bands.
Skalie met 'n wryfvlak naby onderent	2	5	—	—	Shale with a slickenside near bottom.
Skalie en steenkool, gemeng.....		9	496	0	Shale and coal, mixed.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Glanskool, gelaag, skalieagtig in boonste 4 dm. en by onderent	2	6	—	—	Coal, bright, banded; shaly in top 4 in. and at bottom.
Skalie en steenkool, gemeng.....	—	7	499	1	Shale and coal, mixed.
Skalie met enkele groot kwartskorrels in boonste 9 dm.	4	10	—	—	Shale with occasional big quartz grains in top 9 in.
Skalie en steenkool.....	1	4	—	—	Shale and coal.
Skalie, swart, plek-plek koolstofhoudend; met ongeveer vyftien 3-dm. tot 6-dm. skalieagtige steenkoolagies; onderste 14 dm. is sanderig en bevat baie wryfvlakke	27	10	—	—	Shale, black, carbonaceous in parts; with about fifteen 3-in. to 6-in. shaly coal-bands; bottom 14 in. is sandy and contains many slickensides.
Skalie, steenkool en sideriet.....	1	4	—	—	Shale, coal and siderite.
Skalie.....	2	7	—	—	Shale.
Skalie en steenkool.....	2	10	—	—	Shale and coal.
Skalie met drie 8-dm. steenkoolagies	22	6	—	—	Shale with three 8-in. coal-bands.
Skalie met 'n bietjie matkool.....	8	0	—	—	Shale with a little dull coal.
Skalie.....	5	3	575	7	Shale.
Skalie met baie verspreide kwartskorrels	3	0	—	—	Shale with many scattered quartz grains.
Skalie, swart; met baie kwartskorrels en ook hoekige of geronde spoelklippe tot 2 dm. in deursnee; geheel het 'n bont voorkoms	19	4	597	11	Shale, black; with many quartz grains and also angular to rounded pebbles up to 1 in. in diameter; whole has a spotted appearance.
Sandsteen; boonste een-derde is swart en skalieagtig; res is vuilwit, veldspaties, grintagtig tot konglomeraatagtig	8	2	606	1	Sandstone; top one-third is black and shaly; remainder is dirty grey, feldspathic, gritty to conglomeratic.
Skalie, swart.....	5	10	—	—	Shale, black.
Skalie met steenkoolagies.....	3	8	—	—	Shale with coal-bands.
Skalie, swart, plek-plek bruinagtig, plek-plek sanderig	18	0	—	—	Shale, black, brownish in parts, sandy in parts.
Sandsteen, swart, met vaalagtige, fynkorrelrige gedeeltes; onderste 4 vt. is veldspaties en grintagtig; baie steenkoolense in middel	17	4	—	—	Sandstone, black, with greyish, fine-grained portions; bottom 4 ft. is feldspathic and gritty; many coal-lenses in middle.
Sandsteen; boonste 6 vt. bevat baie skalielagies en die res is fynkorrelrig tot grintagtig; vuilwit tot swart	19	7	670	10	Sandstone; top 6 ft. contains many shale bands and remainder is fine-grained to gritty; dirty white to black.
Matkool.....	2	3	—	—	Coal, dull.
Skalie en steenkool.....	1	2	—	—	Shale and coal.
Sandsteen, skalieagtig tot grintagtig	4	6	—	—	Sandstone, shaly to gritty.
Skalie en steenkool.....	1	2	—	—	Shale and coal.
Sandsteen, swart, erg fynkorrelrig	2	10	—	—	Sandstone, black, very fine-grained.
Grintsteen, vuilwit tot swart, plek-plek konglomeraatagtig	13	6	696	3	Grit, dirty white to black; conglomeratic in parts.
Matkool, plek-plek swaar; piriethoudend in middel en by onderent	2	11	—	—	Coal, dull; heavy in parts; pyritic in middle and at bottom.
Sandsteen, swart.....	1	2	—	—	Sandstone, black.
Skalie en steenkool.....	2	8	—	—	Shale and coal.
Skalie en konglomeraatagtige lagies	1	4	—	—	Shale and conglomeratic bands.

Bg. 137 (verv.)

B.H. 137 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	<i>Vt.</i> <i>Ft.</i>	<i>Dm.</i> <i>In.</i>	<i>Vt.</i> <i>Ft.</i>	<i>Dm.</i> <i>In.</i>	
Sandsteen, fynkorrelrig tot skalie- agtig, plek - plek koolstofhou- dend	15	2	719	6	Sandstone, fine-grained to shaly, carbonaceous in parts.
Sandsteen, skalieagtig.....	12	11	732	5	Sandstone, shaly.
Sandsteen.....	8	7	741	0	Sandstone.
Skalie.....	2	6	743	6	Shale.
Sandsteen en skalie.....	15	6	759	0	Sandstone and shale.

BOORGAT 137 : BARBOSA 1241 : BOREHOLE 137

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
		<i>Dm.</i> <i>In.</i>		<i>Vt.</i> <i>Ft.</i>	<i>Dm.</i> <i>In.</i>	
U 354	N.G.....	9		405	0	N.S.
	Glanskool, gelaag, piriethou- dend; met onderste 2½ dm. erg skalieagtig	—		—		Coal, bright, banded, pyritic; with bottom 2½ in. very shaly.
C	N.G.....	3½		—		N.S.
	Glanskool, fyngelaag, effens piriethoudend	16		—		Coal, bright, laminated, slightly pyritic.
	N.G.....	5½		—		N.S.
	Glanskool, fyngelaag.....	22		410	11	Coal, bright, laminated.
	N.G.....	610		461	9	N.S.
B	Glanskool, erg fyngelaag....	21		—		Coal, bright, finely laminated.
	N.G.....	11		—		N.S.
A	Glanskool, gelaag; met baie dun skalielagies, 2 dm. skalie 24 dm. van bo af, onderste 2 dm. skalieagtig	43		468	0	Coal, bright, banded; with many thin shale bands, 2 in. shale 24 in. from top, bottom 2 in. shaly.
U 355	N.G.....	16		478	4	N.S.
C	Glanskool, gelaag, effens skaliegagtig en kalsiethou- dend	26		—		Coal, bright, banded, slightly shaly and calcitic.
	N.G.....	186		496	0	N.S.
B	Glanskool, gelaag; skaliegagtig in boonste 4 dm. en by onderent	30		—		Coal, bright, banded, shaly in top 4 in. and at bottom.
	N.G.....	2,373		696	3	N.S.
A	Matkool, plek-plek swaar; piriethoudend in middel en by onderent	35		699	2	Coal, dull; heavy in parts; pyritic in middel and at bottom.

BOORGAT 137 : BARBOSA 1241 : BOREHOLE 137

ANALYSIS OF AIR-DRIED COAL

ANALISE VAN LUGGEDROOGDE STEENKOOL

No. van B.N.I.-monster F.R.I. sample no.	Dikte (Dm.) THICKNESS (IN.)		RU-STEENKOOL RAW COAL						WASTOETS WASHING TEST		DRY-STOP FLOAT						SINK- STOP SINK	
	Uit- gestuit Excluded	Ge- mon- ster Sam- pled	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	Groot- te (Dm.) Size (in.)	S.G.	Op- brengs Yield %	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	As Ash %
U 354 C	9	62	—	—	19.3	—	—	—	— ^{3/16}	1.40	57.3	—	3.1	8.8	38.0	50.1	2½	33.5
	610	21	—	—	15.2	—	—	—	— ^{3/16}	1.40	64.7	—	3.0	8.5	38.6	49.9	4	27.6
	11	43	—	—	23.3	—	—	—	— ^{3/16}	1.40	46.7	—	3.0	8.8	37.8	50.4	3½	36.0
U 355 C	124	26	—	—	11.4	—	—	—	— ^{3/16}	1.40	81.7	—	2.9	8.0	37.4	51.7	3	26.7
	186	30	—	—	15.2	—	—	—	— ^{3/16}	1.40	72.3	—	2.8	8.1	38.4	50.7	3½	33.9
	2,373	35	—	—	25.7	—	—	—	—1	1.58	52.9	11.2	2.7	18.5	25.1	53.7	P	33.8

BOORGAT 138 : RONDEBOSCHJE 1222 : BOREHOLE 138

Kern 3½ dm.

Core 3½ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Grond.....	8	0	8	0	Soil.
Moddersteen, verweer.....	2	0	28	6	Mudstone, weathered.
Moddersteen, boonste deel rooi en onderste deel vaal.....	36	0	—	—	Mudstone, red towards top and grey towards bottom.
Skalie, vaal.....	7	0	—	—	Shale, grey.
Skalie, swart; met 'n paar dun steenkoollagies.....	3	4	86	6	Shale, black; with a few thin coal-bands.
Glanskool, gelaag, en skalie; intiem gemeng.....	1	6	—	—	Coal, bright, banded, and shale; intimately mixed.
Skalie met baie steenkoollagies..	4	2	—	—	Shale with many coal-bands.
Skalielae en skalieagtige glans- koollae om die beurt.....	3	5	—	—	Shale bands alternating with shaly bright coal-bands.
Skalie met dun steenkoollagies...	2	5	—	—	Shale with thin coal-bands.
Skalie en steenkool, intiem ge- meng, met 5 dm. glanskool by bo-ent en by onderent.....	1	10	—	—	Shale, and coal, intimately mixed; with 5 in. bright coal at top and at bottom.
Skalie met dun steenkoollagies...	3	5	—	—	Shale with thin coal-bands.
Skalie en steenkool, intiem ge- meng, en skalielae, om die beurt	4	0	107	3	Shale, and coal, intimately mixed, alternating with shale bands.
Skalie met dun steenkoollagies...	1	2	108	5	Shale with thin coal-bands.
Glanskool, gelaag; met baie dun skalieagtige lagies.....	1	8	—	—	Coal, bright, banded; with many thin shaly bands.
Skalie.....	1	10	—	—	Shale.
Glanskool, gelaag; skalieagtig in boonste gedeelte.....	1	4	113	3	Coal, bright, banded; shaly in top portion.
Skalie met dun steenkoollagies...	4	2	117	5	Shale with thin coal-bands.
Glanskool, gelaag, plek-plek skalie- agtig, met 4 dm. skalie 18 dm. van onder af.....	3	6	—	—	Coal, bright, banded, shaly in parts; with 4 in. shale 18 in. from bottom.
Skalie.....	9	—	—	—	Shale.
Glanskool, gelaag, erg skalieagtig.	8	—	—	—	Coal, bright, banded, very shaly.
Skalie.....	1	5	—	—	Shale.
Skalie en steenkool, met baie wryfvlakke.....	1	5	—	—	Shale and coal, with many slicken- sides.
Glanskool, gelaag, erg skalieagtig	3	1	128	3	Coal, bright, banded, very shaly.
Skalie met dun steenkoollagies...	1	7	—	—	Shale with thin coal-bands.
Skalielae en skalieagtige glanskool- lae om die beurt.....	4	9	—	—	Shale bands alternating with shaly bright coal-bands.
Skalie met dun steenkoollagies...	2	6	137	3	Shale with thin coal-bands.
Glanskool, gelaag; met dun skalie- lagies in boonste 12 dm.; effens skalieagtig en korrelrig by onderent.....	2	10	—	—	Coal, bright, banded; with thin shale bands in top 12 in.; slightly shaly and granular towards bottom.
Skalie met dun steenkoollagies...	3	7	—	—	Shale with thin coal-bands.
Glanskool, gelaag.....	1	1	144	9	Coal, bright, banded.
Skalie met dun steenkoollagies...	3	10	—	—	Shale with thin coal-bands.
Skalielae en skalieagtige glanskool- lae om die beurt.....	4	0	—	—	Shale bands alternating with shaly bright coal-bands.
Skalie met dun steenkoollagies...	33	2	185	11	Shale with thin coal-bands.
Glanskool, gelaag, effens sideriet- houdend.....	1	1	187	0	Coal, bright, banded, slightly sideritic.
Skalie met dun steenkoollagies...	31	10	219	0	Shale with thin coal-bands.
Glanskool, gelaag, skalieagtig, sideriet- en piriethoudend.....	2	0	221	0	Coal, bright, banded, shaly, side- ritic and pyritic.
Skalie met dun steenkoollagies...	40	3	—	—	Shale with thin coal-bands.
Skalie, vaal.....	2	6	—	—	Shale, grey.
Skalie, vaal, sanderig.....	7	6	—	—	Shale, grey, sandy.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sandsteen.....	1	0	—	—	Sandstone.
Skalie, vaal, sanderig.....	4	6	282	10	Shale, grey, sandy.
Moddersteen, ysterhoudend met kalsietlense	2	7	—	—	Mudstone, ferruginous, with cal- cite lenses.
Sandsteen, skalieagtig.....	5	0	—	—	Sandstone, shaly.
Skalie, vaal, sanderig.....	5	0	—	—	Shale, grey, sandy.
Skalielae, sandsteenlae en lagies van kleikorrel-konglomeraat om die beurt	3	3	—	—	Shale, bands, sandstone bands and bands of clay-pellet conglome- rate alternating.
Sandsteen, skalieagtig.....	4	2	—	—	Sandstone, shaly.
Grintsteen.....	5	0	—	—	Grit.
Skalie, sanderig.....	—	9	—	—	Shale, sandy.
Steenkool.....	—	5	—	—	Coal.
Moddersteen, ysterhoudend.....	1	6	—	—	Mudstone, ferruginous.
Skalie, vaal, met enkele sanderige lagies	10	0	—	—	Shale, grey, with occasional sandy bands.
Steenkool, skalieagtig.....	1	4	—	—	Coal, shaly.
Skalie, swart.....	4	7	326	10	Shale, black.
Skalie, koolstofhoudend.....	1	3	—	—	Shale, carbonaceous.
Skalie, vaal tot swart, sanderig...	13	6	—	—	Shale, grey to black, sandy.
Sandsteen, grofkorrelrig.....	4	8	—	—	Sandstone, coarse-grained.
Skalie, swart.....	4	0	350	10	Shale, black.
Skalie en skalieagtige matkool...	2	5	353	3	Shale and shaly coal.
Skalie, sanderig.....	3	2	—	—	Shale, sandy.
Sandsteen.....	1	3	357	8	Sandstone.
Skalie en steenkool.....	4	8	362	4	Shale and coal.
Sandsteen met drie skalielagies...	6	7	369	1	Sandstone, with three shales.
Skalie en steenkool, gemeng.....	4	11	374	0	Shale and coal, mixed.
Skalie, swart, met enkele steen- koollagies	14	2	388	4	Shale, black, with occasional coal- bands.
Skalie en steenkool.....	2	2	390	6	Shale and coal.
Skalie, sanderig.....	2	10	—	—	Shale, sandy.
Sandsteen.....	8	3	401	7	Sandstone.
Skalie, swart, met 'n steenkool- lagie by onderent	6	4	—	—	Shale, black, with a coal-band at bottom.
Skalie, sanderig.....	4	0	—	—	Shale, sandy.
Sandsteen, grofkorrelrig.....	9	0	—	—	Sandstone, coarse-grained.
Skalie en sandsteen.....	1	6	—	—	Shale and sandstone.
Sandsteen.....	3	10	—	—	Sandstone.
Skalie, sanderig, met sandsteen- lenses	3	6	—	—	Shale, sandy, with sandstone lenses.
Sandsteen met enkele skalielagies na onder	10	2	440	2	Sandstone, with occasional shale bands towards bottom.

BOORGAT 138 : RONDEBOSCHJE 1222 : BOREHOLE 138

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth	Nature of strata
U 545 B	N.G..... Glanskool, gelaag, met baie dun skalieagtige lagies	Dm. In. 14 20	Vt. Ft. 108 —	N.S. Coal, bright, banded; with many thin shaly bands.
A	N.G..... Glanskool, gelaag; skalieagtig in boonste gedeelte	22 16	— 113	N.S. Coal, bright, banded, shaly in top portion.
U 546 D	N.G..... Glanskool, gelaag, plek-plek skalieagtig; met 4 dm. skalie 18 dm. van onder af	50 42	117 —	N.S. Coal, bright, banded; shaly in parts; with 4 in. shale 18 in. from bottom.
C	N.G..... Glanskool, gelaag, erg skalie- agtig	51 37	— 128	N.S. Coal, bright, banded, very shaly.
B	N.G..... Glanskool, gelaag; met dun skalielagies in boonste 12 dm.; effens skalieagtig en korrelrig na onder	108 34	137 —	N.S. Coal, bright, banded; with thin shale bands in top 12 in.; slightly shaly and granular towards bottom.
A	N.G..... Glanskool, gelaag.....	43 13	— 144	N.S. Coal, bright, banded.
U 547 A	N.G..... Glanskool, gelaag, effens sideriethoudend	398 13	185 187	11 0 N.S. Coal, bright, banded, slightly sideritic.

BOORGAT 139 : ORANGEFONTEIN 491 : BOREHOLE 139

Kern 3½ dm.

Core 3½ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sand.....	25	0	25	0	Sand.
Merrel, pers.....	40	8	85	6	Marl, purple.
Sliksteen met min kalkknolle en merrellae	58	10	—	—	Siltstone with few calcareous nodules and marl bands.
Merrel, pers en bruin.....	10	0	—	—	Marl, purple and brown.
Sliksteen, ligrooi, met min kalkhoudende knolle	9	0	165	0	Siltstone, pink, with a few calcareous nodules.
Sliksteen, bruin tot ligrooi, met min kalkhoudende knolle	16	0	—	—	Siltstone, brown to light red, with a few calcareous nodules.
Merrel, pers, ligrooi en gevlek...	48	6	—	—	Marl, purple, light red and mottled.
Sliksteen, wit en ligrooi.....	9	2	238	8	Siltstone, white and light red.
Sliksteen, ligbruin, met min kalkhoudende knolle	23	0	—	—	Siltstone, light brown, with a few calcareous nodules.
Moddersteen, donkerrooi, met min kalkhoudende knolle	26	0	—	—	Mudstone, dark red, with a few calcareous nodules.
Sliksteen, wit en ligrooi.....	2	4	—	—	Siltstone, white and light red.
Moddersteen, bruinrooi, met min kalkhoudende knolle	16	3	306	3	Mudstone, brown-red, with a few calcareous nodules.
Merrel met sliksteenlae; ligrooi en pers (Rooilae)	11	2	317	5	Marl with bands of siltstone; light red and purple (Red Beds).
Sandsteen en grintsteen, sag, kleiagtig, bruin en pers, met 'n dun skalielagie in onderste deel	6	8	—	—	Sandstone, and grit, soft, clayey, brown and purple, with a thin shale band towards bottom.
Sandsteen, bruin, met rooi modderklontjies	2	10	—	—	Sandstone, brown, with red mud pellets.
Sandsteen, vaalpers.....	1	8	328	7	Sandstone, grey-purple.
Sandsteen, grofkorrelrig, vaalpers, met twee 2 dm. skalielagies	28	0	—	—	Sandstone, coarse-grained, grey-purple, with two 2-in. shale bands.
Sandsteen en grintsteen, wit en persagtig; kleierig in onderste deel; bevat dun vaalgroen skalielagies (Moltenolae)	19	5	376	0	Sandstone and grit, white and purplish; clayey towards bottom; contains thin grey-green shale bands (Molteno Beds).
Moddersteen, bruin tot bruinrooi, met vaalgroen vlekke, enkele kalkhoudende knolle	71	0	—	—	Mudstone, brown to brown-red, mottled with grey-green, and occasional calcareous nodule.
Moddersteen, bruin met vaal dele; word geleidelik dowwer van kleur na onder	54	0	—	—	Mudstone, brown, with grey portions; gradually becomes duller in colour towards bottom.
Moddersteen, vaal, met min kalsietaartjies; onderste 30 dm. donkervaal; plek-plek piriethoudend	88	7	591	2	Mudstone, grey, with a few calcite veins; bottom 30 in. dark grey pyritic in parts.
Skalie, vaalswart.....	5	5	596	7	Shale, grey-black.
Glanskool, gelaag, erg skalieagtig, kalsiet- en piriethoudend	1	6	—	—	Coal, bright, banded, very shaly, calcitic and pyritic.
Skalie, piriethoudend.....	—	7	598	8	Shale, pyritic.
Glanskool, gelaag, skalieagtig, kalsiet- en piriethoudend; 5 dm. skale 12 dm. van bo af	3	7	—	—	Coal, bright, banded, shaly, calcitic and pyritic; 5 in. shale 12 in. from top.
Skalie, swart; met 4 dm. steenkool	2	0	—	—	Shale, black; with 4 in. coal.
Glanskool, gelaag; plek-plek korrelrig; erg skalieagtig en piriethoudend	1	3	—	—	Coal, bright, banded; granular in parts; very shaly and pyritic.
Skalie, swart en vaalswart, met drie dun steenkoollagies	14	10	620	4	Shale, black and grey-black; with three thin coal-bands.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Glanskool , gelaag, piriethoudend.	1	2	621	6	Coal, bright, banded, pyritic.
Skalie, swart, met dun steenkool-lagies	9	0	—	—	Shale, black, with thin coal-bands
Skalielae en glanskoollae om die beurt	1	8	—	—	Shale bands alternating with bright coal-bands.
Skalie, swart, met dun steenkool-lagies	25	0	657	2	Shale, black, with thin coal-bands
Glanskool , gelaag, erg kalsiethoudend; met 4 dm. skalie 12 dm. van onder af	2	1	659	3	Coal, bright, banded, very calcitic with 4 in. shale 12 in. from bottom.
Skalie, swart, met dun steenkool-lagies	4	2	663	5	Shale, black, with thin coal-bands
Glanskool , gelaag, met baie dun skalieagtige lagies, effens piriethoudend	4	2	—	—	Coal, bright, banded, with many thin shaly bands; slightly pyritic and calcitic.
Skalie.....	—	8	—	—	Shale.
Glanskool , gelaag, skalieagtig, piriethoudend	1	3	—	—	Coal, bright, banded, shaly, pyritic and calcitic.
Skalie, plek-plek koolstofhoudend; met steenkoolstrepies	1	1	—	—	Shale, carbonaceous in parts; with coal-streaks.
Glanskool , gelaag; piriethoudend by onderent	2	2	—	—	Coal, bright, banded; pyritic towards bottom.
Skalie.....	1	6	—	—	Shale.
Glanskool , gelaag, plek-plek vitrietagtig; piriethoudend	1	2	—	—	Coal, bright, banded, vitrainous in parts; pyritic and calcitic.
Skalie, vaal, swart na ondertoe...	3	11	—	—	Shale, grey, black towards bottom.
Glanskool , gelaag, kalsiethoudend; effens skalieagtig by bo-ent	2	0	681	4	Coal, bright, banded, calcitic; slightly shaly towards top.
Skalie, swart, met dun steenkool-lagies en piriethoudend	5	7	—	—	Shale, black, with thin coal-bands and pyrite nodules.
Skalielae en glanskoollae om die beurt	3	8	690	7	Shale bands alternating with bright coal-bands.
Glanskool , gelaag; met baie dun skalieagtige lagies; kalsiet- en piriethoudend	2	11	—	—	Coal, bright, banded; with many thin shaly bands; calcitic and pyritic.
Skalie.....	1	5	—	—	Shale.
Glanskool , gelaag, plek-plek korrelrig en skalieagtig; taamlik kalsiet- en piriethoudend	4	3	699	2	Coal, bright, banded, granular and shaly in parts; fairly calcitic and pyritic.
Skalie, swart, met dun steenkool-lagies	19	8	718	10	Shale, black, with thin coal-bands.
Skalie, vaalswart.....	5	0	—	—	Shale, grey-black.
Skalie, swart, met dun steenkool-lagies	17	10	741	8	Shale, black, with thin coal-bands.
Skalie, sanderig, met 'n swart matriks	4	9	—	—	Shale, sandy, with a black matrix.
Skalie, swart, met dun steenkool-lagies	7	0	—	—	Shale, black, with thin coal-bands.
Skalie, sanderig, koolstofhoudend	1	0	—	—	Shale, sandy, carbonaceous.
Skalie, swart, met steenkool-lagies	12	5	767	0	Shale, black, with coal-bands.
Skalielae, breed, en breë skalie-agtige steenkool-lagies om die beurt	9	9	776	9	Shale, bands, broad, alternating with broad, shaly coal-bands.
Steenkool , gemeng, skalieagtig en piriethoudend, met baie skalie-lagies	3	0	—	—	Coal, mixed, shaly and pyritic, with numerous shale bands.
Skalie.....	1	6	—	—	Shale.
Matkool , glansend, plek-plek erg skalieagtig	3	9	—	—	Coal, dull, lustrous, very shaly in parts.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	<i>Vt.</i> <i> Ft.</i>	<i>Dm.</i> <i> In.</i>	<i>Vt.</i> <i> Ft.</i>	<i>Dm.</i> <i> In.</i>	
Steenkool, gemeng, erg skalieagtig, piriethoudend	2	4	787	4	Coal, mixed, very shaly, pyritic.
Sandsteen, wit, met tussengelaagde vaal skalie	9	10	797	2	Sandstone, white, with interbanded grey shale.
Skalie, swart, met steenkoollagies	38	4	835	6	Shale, black, with coal-bands.
Matkool, plek-plek korrelrig met enkele glanskoollagies; kalsiet-en piriethoudend; skalieagtige lagies naby bo-ent	6	0	—	—	Coal, dull, granular in parts; with an occasional bright coal-band; calcitic and pyritic; shaly bands near top.
Matkool, korrelrig, plek - plek skalieagtig; met 'n groot pirietskool 24 dm. van onder af	6	8	—	—	Coal, dull, granular, shaly in parts; with a large pyrite nodule 24 in. from bottom.
Steenkool, gemeng; hoofsaaklik glansend	4	10	—	—	Coal, mixed, mainly bright.
Glanskool, met glansende matkoollagies in boonste 15 dm.; kalsiet-en piriethoudend	4	4	858	2	Coal, bright, with thin lustrous dull coal-bands in top 15 in.; calcitic and pyritic.
Sandsteen, vaal tot swart; en skalie met enkele matkoollagies	4	6	862	8	Sandstone, grey to black; and shale with occasional dull coal-bands.
Glanskool, gelaag; met baie skalieagtige lagies	3	1	—	—	Coal, bright, banded; with many shaly bands.
Sandsteen, koolstofhoudend.....		6	—	—	Sandstone, carbonaceous.
Glanskool, gelaag; met baie skalieagtige lagies; onderste 6 dm. piriethoudend	3	6	870	0	Coal, bright, banded; with many shaly bands; bottom 6 in. pyritic.
Sandsteen, vaal, skalieagtig, en sanderige skalie met wit sandsteenlagies	24	9	—	—	Sandstone, grey, shaly and sandy shale with white sandstone-bands.
Sandsteen, vaal, skalieagtig, met grofkorrelriger lagies	23	6	918	9	Sandstone, grey, shaly, with coarser-grained bands.
Matkool, met dun sandsteenlagies	1	1	—	—	Coal, dull, with thin sandstone bands.
Matkool, glansend, met baie wryfvlakke (swak kernwins)	35 (?)		922	9	Coal, dull, lustrous, with many slickensides (poor core recovery)
Sandsteen, vaal, skalieagtig.....	7	3	930	0	Sandstone, grey, shaly.

Artesiese water met 'n temperatuur van 85° F, gepaard met baie gas, vloei uit teen sowat 100 gellings per uur.

Artesian water having a temperature of 85° F, accompanied by much gas, flows out at approximately 100 gallons per hour.

BOORGAT 139 : ORANGEFONTEIN 491 : BOREHOLE 139

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
			Vt. Ft.	Dm. In.	
U 541 C	N.G.....	Dm. In. 7	598	8	N.S.
	Glanskool, gelaag, skalieagtig, kalsiet- en piriethoudend, 5 dm. skalie 12 dm. van bo af uitgesluit	43	—	—	Coal, bright, banded, shaly, calcitic and pyritic; 5 in. shale 12 in. from top exclu- ded.
	N.G.....	217	620	4	N.S.
	Glanskool, gelaag, piriethou- dend	14	—	—	Coal, bright, banded, pyritic.
	N.G.....	428	657	2	N.S.
A	Glanskool, gelaag, erg kalsiet- houdend; met 4 dm. skalie 12 dm. van onder af	25	659	3	Coal, bright, banded, very calcitic, with 4 in. shale 12 in. from bottom.
U 542 G	N.G.....	50	663	5	N.S.
	Glanskool, gelaag, met baie dun skalieagtige lagies; effens piriët- en kalsiethou- dend	50	—	—	Coal, bright, banded, with many thin shaly bands; slightly pyritic and calcitic.
	N.G.....	8	—	—	N.S.
	Glanskool, gelaag, skalieagtig, piriët- en kalsiethoudend	15	—	—	Coal, bright, banded, shaly, pyritic and calcitic.
	N.G.....	13	—	—	N.S.
	Glanskool, gelaag, piriethou- dend by onderent	26	—	—	Coal, bright, banded; pyritic towards bottom.
	N.G.....	18	—	—	N.S.
	Glanskool, gelaag, plek-plek vitrietagtig; piriët- en kal- siethoudend	14	—	—	Coal, bright, banded, vitrai- nous in parts; pyritic and calcitic.
	N.G.....	47	—	—	N.S.
	Glanskool, gelaag, kalsiethou- dend; effens skalieagtig by bo-ent	24	681	4	Coal, bright, banded, calcitic; slightly shaly towards top.
	N.G.....	111	—	—	N.S.
	Glanskool, gelaag, met baie dun skalieagtige lagies; kalsiet- en piriethoudend	35	—	—	Coal, bright, banded; with many thin shaly bands; calcitic and pyritic.
	N.G.....	17	—	—	N.S.
	Glanskool, gelaag, plek-plek korrelrig en skalieagtig; taamlik kalsiet- en piriët- houdend	51	699	2	Coal, bright, banded, granular and shaly in parts; fairly calcitic and pyritic.
U 543 G	N.G.....	117	776	9	N.S.
	Steenkool, gemeng, piriethou- dend, met baie skalielagies	36	—	—	Coal, mixed, pyritic; with numerous shale bands.
	N.G.....	18	—	—	N.S.
	Matkool, glansend, plek-plek erg skalieagtig	45	—	—	Coal, dull, lustrous, very shaly in parts.
	Steenkool, gemeng, erg skalie- agtig; piriethoudend	28	787	4	Coal, mixed, very shaly, pyritic.
	N.G.....	578	835	6	N.S.
	Matkool, plek-plek korrelrig, met enkele glanskoollagies; kalsiet- en piriethoudend; skalieagtige lagies naby bo-ent	72	—	—	Coal, dull, granular in parts; with an occasional bright coal-band; calcitic and pyri- tic; shaly bands near top.

Bg. 139 (verv.)

B.H. 139 (contd.)

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
		<i>Dm. In.</i>	<i>Vt. Ft.</i>	<i>Dm. In.</i>	
C	Matkool, korrelrig, plek-plek skalieagtig; met 'n groot pirietskool 24 dm. van onder af	80	—	—	Coal, dull, granular, shaly in parts, with a large pyrite nodule 24 in. from bottom.
B	Steenkool, gemeng, hoofsaaklik glansend	58	—	—	Coal, mixed, mainly bright.
A	Glanskool met glansende matkoolagies in boonste 15 dm.; kalsiet- en piriethoudend (10 dm. kernverlies)	52	858	2	Coal, bright, with thin lustrous dull coal-bands in top 15 in.; calcitic and pyritic (10 in. core loss).
U 544	N.G.	52	862	8	N.S.
C	Glanskool, gelaag; met baie skalieagtige lagies	37	865	9	Coal, bright, banded; with many shaly bands.
	N.G.	6	—	—	N.S.
B	Glanskool, gelaag, met baie skalieagtige lagies; onderste 6 dm. piriethoudend (3 dm. kernverlies)	42	870	0	Coal, bright, banded; with many shaly bands; bottom 6 in. pyritic (3 in. core loss).
	N.G.	598	—	—	N.S.
A	Matkool, glansend, met baie wryfvlakke (swak kernwins)	35 (?)	922	9	Coal, dull, lustrous, with many slickensides (poor core recovery).

BOORGAT 139 : ORANGEFONTEIN 491 : BOREHOLE 139

ANALISE VAN LUGGEDROOGDE STEENKOOI

ANALYSIS OF AIR-DRIED COAL

No. van B.N.I.-monster F.R.I. sample no.	DIKTE (DM.) THICKNESS (IN.)		RU-STEENKOOI RAW COAL						WASTOETS WASHING TEST		DRYSTOF FLOAT						SINK STOF SINK	
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	Groot- te (Dm.) Size (In.)	S.G.	Op- brengs Yield %	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	As Ash %
U 541	5	38	—	—	22.5	—	—	—	— ^{3/16}	1.40	57.4	—	1.7	10.4	38.9	49.0	5	38.9
	217	14	—	2.0	15.4	35.1	47.5	5	—	—	—	—	—	—	—	—	—	—
	428	25	—	—	29.1	—	—	—	— ^{3/16}	1.40	43.5	—	2.0	8.7	36.9	52.4	5½	44.8
U 542	50	50	—	—	20.2	—	—	—	— ^{3/16}	1.40	56.5	—	1.7	10.5	38.1	49.7	5	32.7
	8	15	—	1.5	30.5	30.8	37.2	3	—	—	—	—	—	—	—	—	—	—
	13	26	—	—	25.3	—	—	—	— ^{3/16}	1.40	34.0	—	1.4	11.2	38.9	48.5	5	32.5
D	18	14	—	1.7	25.3	33.3	39.7	3½	—	—	—	—	—	—	—	—	—	—
	47	24	—	—	23.7	—	—	—	— ^{3/16}	1.40	53.9	—	1.4	8.3	38.7	51.6	5	41.8
	111	35	—	—	17.0	—	—	—	— ^{3/16}	1.40	65.4	—	1.5	9.4	37.5	51.6	5	31.3
B	17	51	—	—	29.5	—	—	—	— ^{3/16}	1.40	37.1	—	1.6	9.2	36.5	52.7	5	41.4
	928																	

Bg. 139 (verv.)

B.H. 139 (contd.)

No. van B.N.I.-monster F.R.I. sample no.	Dikte (Dm.) Thickness (in.)		RU-STEENKOOL Raw Coal					WASTOETS Washing Test		DRYSTOP FLOAT					SINK STOP SINK					
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	Groot- te (Dm.) Size (in.)	S.G.	Op- brengs Yield %	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	As Ash %	%	
U. 543	—	36	—	—	43.8	—	—	—	—	1.58	18.4	—	—	—	—	—	—	—	—	—
	18	45	—	2.0	34.2	20.4	43.4	—	—	1.58	14.5	—	—	—	—	—	—	—	—	—
	—	28	—	1.5	35.6	25.0	37.9	—	—	1.58	33.4	—	—	—	—	—	—	—	—	—
	578	—	—	—	—	—	—	—	—	1.58	29.3	—	—	—	—	—	—	—	—	—
	—	72	—	1.8	33.7	22.9	41.6	—	—	1.58	16.0	—	—	—	—	—	—	—	—	—
U. 544	—	80	—	—	38.5	—	—	—	—	1.58	38.6	12.0	2.2	15.5	25.1	57.2	1Ag	34.0	—	—
	—	58	—	—	26.9	—	—	—	—	1.58	82.0	13.0	2.2	10.2	30.1	57.5	1Ag	38.1	—	—
	54	52	—	—	15.2	—	—	—	—	1.58	45.8	13.5	1.9	8.7	30.8	58.6	1Ag	—	—	—
	—	37	—	—	19.7	—	—	—	— ^{3/16}	1.40	32.9	11.6	1.9	19.2	24.0	54.9	F	44.0	—	—
	—	—	—	—	—	—	—	—	—	1.58*	78.7*	12.7*	1.9*	13.1*	28.0*	57.0*	—	—	—	—
B	6	42	—	—	22.0	—	—	—	— ^{3/16}	1.40	39.3	13.8	2.0	6.9	30.5	60.6	1½	—	—	—
	—	—	—	—	—	—	—	—	—	1.40	32.2	11.9	1.9	17.6	24.0	56.5	F	47.9	—	—
	598	—	—	—	—	—	—	—	—	1.58	71.5*	12.9*	2.0*	11.7*	27.6*	58.7*	—	—	—	—
A	—	35	—	—	17.0	—	—	—	—	1.58	88.9	12.9	2.1	12.6	26.5	58.8	1Ag	51.9	—	—

* Bereken / Calculated.

BOORGAT 140 : BERG EN DALEN 1225 : BOREHOLE 140

Kern 3½ dm.

Core 3½ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sand.....	20	0	20	0	Sand.
Sandsteen, ligrooi.....	12	4	32	4	Sandstone, light red.
Sandsteen, fynkorrelrig, wit tot ligrooi; gekruisde lae op een plek	111	4	—	—	Sandstone, fine-grained, white to light red; cross-bedded in one place.
Sandsteen, fynkorrelrig, met enkele kalkhoudende knolle; plek-plek goedgelaag; gekruisde lae alge- meen	61	2	212	1	Sandstone, fine-grained, with a few calcareous nodules; well bedded in parts; cross-bedding common.
Sandsteen, vaalgroen, kleiagtig (Holkranssandsteen)	2	3	213	4	Sandstone, grey-green, clayey (Cave Sandstone).
Merrel, pers en gevlek.....	8	0	—	—	Marl, purple and mottled.
Sliksteen met min groot kalkhou- dende knolle en sagte merrel- lagies	53	8	275	0	Siltstone with a few large calca- reous nodules and soft marl bands.
Merrel met enkele lagies sliksteen en moddersteen; pers en bruin	68	2	—	—	Marl with occasional bands of siltstone and mudstone; purple and brown.
Moddersteen, vaalgroen, met min kalkhoudende knolle	9	5	—	—	Mudstone, grey-green, with a few calcareous nodules.
Merrel, bruin en vaalgroen.....	19	0	—	—	Marl, brown and grey-green.
Sliksteen, wit en bruin, met sagte bruin moddersteenlagies	9	2	384	0	Siltstone, white and brown, with soft brown mudstone bands.
Merrel, bruin, wit en pers.....	14	6	—	—	Marl, brown, white and purple.
Merrellae, moddersteenlae en slik- steenlae om die beurt; wit tot bruin	21	11	—	—	Marl bands, mudstone bands and siltstone bands alternating white to brown.
Sliksteen met min kalkhoudende knolle; vaalgroen, goedgelaag	14	0	—	—	Siltstone with a few calcareous nodules; grey-green, well bedded.
Sliksteen, bruin, met min kalk- houdende knolle	9	10	—	—	Siltstone, brown, with a few calcareous nodules.
Moddersteen, vaalwit, met min bruin vlekke	6	1	—	—	Mudstone, grey-white, with a few brown spots.
Moddersteen, bruin gevlek, met enkele kalkhoudende knolle en merrellagies	50	3	—	—	Mudstone, mottled with brown with occasional calcareous nodules and marl bands.
Sliksteen, vaalwit, met bruin kalk- houdende knolle	6	0	—	—	Siltstone, grey-white, with brown calcareous nodules.
Merrel en kleipilkonglomeraat; groenagtig wit	3	3	—	—	Marl and clay-pellet conglomerate; rate; greenish white.
Merrel, bruin, sag.....	10	6	—	—	Marl, brown, soft.
Merrel met sliksteenlae, vaalwit..	11	2	—	—	Marl with siltstone bands, grey white.
Sliksteen, wit, hard (Rooilae)....	5	8	536	8	Siltstone, white, hard (Red Beds).
Sandsteen, wit, kleiagtig, middel- korrelrig	1	4	—	—	Sandstone, white, clayey, medium grained.
Sliksteen, bruin, kalkhoudend....	9	4	—	—	Siltstone, brown, calcareous.
Skalie, fyngelaag, vaalpers.....	2	2	—	—	Shale, laminated, grey-purple.
Sandsteenlense in bruin kleipil- konglomeraat		3	—	—	Sandstone lenses in brown clay pellet conglomerate.
Sandsteen, kleierig, middelkorrel- rig, wit, bruin, vaalpers, plek- plek met kalkhoudende knolle; en vaalpers moddersteen	14	0	—	—	Sandstone, clayey, medium grained, white, brown, grey, purple, with calcareous nodules in places; and grey-purple mud- stone.

Bg. 140 (verrv.)

B.H. 140 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sandsteen, wit, middelkorrelrig met kleilense (Moltenolae)	1	8	565	6	Sandstone, white, medium-grained, with clay lenses (Molteno Beds).
Moddersteen, rooibruin, bruin, pers, vaalpers, vaal	167	0	736	9	Mudstone, red-brown, brown, purple, grey-purple, grey.
Skalie, vaalswart.....	4	7	—	—	Shale, grey-black.
Skalie, koolstofhoudend.....	—	7½	741	11½	Shale, carbonaceous.
Glanskool met heelwat skalielagies tot ½ dm. dik; piriët- en kalsiethoudend	2	4	—	—	Coal, bright, with several shale bands up to ½ in. thick; pyritic and calcitic.
Skalie.....	—	7	—	—	Shale.
Glanskool; skalieagtig in boonste 2 dm.; piriët- en kalsiethoudend	1	4½	—	—	Coal, bright, shaly in top 2 in.; pyritic and calcitic.
Skalie.....	—	4	—	—	Shale.
Glanskool, skalieagtig in middelste 2 dm.; kalsiethoudend	2	3	748	10	Coal, bright; shaly in middle 2 in.; calcitic.
Skalie, swart en vaalswart; met twee dun steenkoollagies naby bo-ent	18	1	—	—	Shale, black and grey-black; with two thin coal-bands near top.
Skalielagies en steenkoollagies om die beurt	27	8	794	7	Shale bands and coal-bands alternating.
Glanskool, gelaag; met enkele dun skalielagies; kalsiethoudend	1	5	796	0	Coal, bright, banded; with occasional thin shale bands, calcitic.
Skalie.....	1	3	—	—	Shale.
Glanskool, skalieagtig by bo- en onderent	1	3	—	—	Coal, bright, shaly at top and bottom.
Skalie met dun steenkoollagies...	—	7	—	—	Shale with thin coal-bands.
Glanskool, skalieagtig in boonste 3 dm.	1	5	—	—	Coal, bright, shaly in top 3 in.
Skalie.....	9	2½	809	8½	Shale.
Glanskool, gelaag; met enkele dun skalielagies; piriethoudend	2	10½	—	—	Coal, bright, banded; with occasional thin shale bands; pyritic.
Skalie met 'n glanskoollagie in middel	—	8	—	—	Shale with a bright coal-band in middle.
Glanskool, gelaag; skalieagtig in boonste 4½ dm.; piriethoudend	2	8	—	—	Coal, bright, banded; shaly in top 4½ in.; pyritic.
Skalie.....	—	1	—	—	Shale.
Glanskool, gelaag, piriethoudend.	2	2	818	2	Coal, bright, banded, pyritic.
Skalie met dun steenkoollagies...	5	0	—	—	Shale with thin coal-bands.
Sandsteen, skalieagtig.....	—	1	—	—	Sandstone, shaly.
Skalie.....	1	7	824	10	Shale.
Glanskool, gelaag.....	—	10	—	—	Coal, bright, banded.
Skalie.....	—	5½	—	—	Shale.
Glanskool, gelaag.....	1	2	—	—	Coal, bright, banded.
Skalie.....	—	1½	—	—	Shale.
Glanskool, gelaag.....	1	11	—	—	Coal, bright, banded.
Glanskool, gelaag, erg sideriethoudend	—	2	—	—	Coal, bright, banded, very sideritic.
Glanskool, gelaag, piriethoudend.	—	11	830	5	Coal, bright, banded, pyritic.
Skalie, vaal, sanderig in boonste helfte	2	0	—	—	Shale, grey, sandy in top half.
Glanskool, gelaag.....	—	9	—	—	Coal, bright, banded.
Skalie met steenkoollagies.....	4	9	837	11	Shale with coal-bands.
Glanskool, gelaag.....	—	8	—	—	Coal, bright, banded.
Steenkool, erg sideriethoudend...	—	2	—	—	Coal, very sideritic.
Glanskool, gelaag, piriët- en sideriethoudend	—	4	—	—	Coal, bright, banded, pyritic and calcitic.
Skalie.....	—	2	—	—	Shale.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Naturê of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Glanskool, gelaag, piriethoudend.	1	2	840	5	Coal, bright, banded, pyritic.
Skalie.....		2	—		Shale.
Glanskool met skalielagies.....		6	—		Coal, bright, with shale bands.
Skalie met dun steenkoollagies...	5	7	846	10	Shale with thin coal-bands.
Glanskool met dun skalielagies...		5	—		Coal, bright, with thin shale band
Skalie.....		2½	—		Shale.
Glanskool, gelaag, sideriethoudend	1	0½	848	6	Coal, bright, banded, sideritic.
Skalie met dun steenkoollagies...	11	10	860	11	Shale with thin coal-bands.
Glanskool, gelaag, skalieagtig in onderste 5 dm.; kalsiethoudend	1	10	862	9	Coal, bright, banded, shaly bottom 5 in.; calcitic.
Skalie met dun steenkoollagies...	3	10	866	7	Shale with thin coal-bands.
Glanskool, gelaag, effens kalsiet- houdend; sideriethoudend in onderste helfte	1	2	867	9	Coal, bright, banded, slight calcitic; sideritic in bottom half
Skalie met dun steenkoollagies...	28	9	—		Shale with thin coal-bands.
Glanskool, gelaag; met ½ dm. skalie 9 dm. van bo af; piriët-, kalsiet- en sideriethoudend	5	7	902	1	Coal, bright, banded; with ½ in. shale 9 in. from top; pyritic calcitic and sideritic.
Skalie met enkele steenkoollagies.	44	3	947	2	Shale with occasional coal-band
Skalie, koolstofhoudend, met 'n bietjie steenkool	8	7	955	9	Shale, carbonaceous, with a little coal.
Skalie, vaal en swart.....	16	5	972	4	Shale, grey and black.
Matkool en koolstofhoudende skalie	2	0	—		Coal, dull, and carbonaceous shale.
Steenkool; hoofsaaklik dof.....	7	4	—		Coal; mainly dull.
Matkool en koolstofhoudende skalie	1	11	—		Coal, dull, and carbonaceous shale.
Matkool met ½ dm. skalie 24 dm. van onder af	5	10	—		Coal, dull, with ½ in. shale 24 in. from bottom.
Matkool met 3 dm. koolstofhou- dende skalie 41 dm. van onder af	5	10	—		Coal, dull, with 3 in. carbonaceous shale 41 in. from bottom.
Skalie, koolstofhoudend.....	1	3	—		Shale, carbonaceous.
Matkool met 2 dm. vaal skalie 55 dm. van onder af	6	4	—		Coal, dull, with 2 in. grey shale 55 in. from bottom.
Skalie, vaal.....		2	—		Shale, grey.
Steenkool, gemeng.....		9	—		Coal, mixed.
Skalie, koolstofhoudend, en min- derwaardige steenkool	1	9	—		Shale, carbonaceous, and inferior coal.
Glanskool, kalsiethoudend en erg piriethoudend		5	—		Coal, bright, calcitic and very pyritic.
Skalie, koolstofhoudend, en min- derwaardige steenkool	2	0	—		Shale, carbonaceous, and inferior coal.
Steenkool, gemeng, piriethoudend, met twee ½ dm. skalielagies	4	4	—		Coal, mixed, pyritic, with two ½-in. shale bands.
Skalie met 2 dm. steenkool in middel		6	—		Shale with 2 in. coal in middle.
Steenkool, hoofsaaklik dof; meer glansend by onderent	1	8½	—		Coal, mainly dull coal, bright at bottom.
Skalie, vaal.....		0½	—		Shale, grey.
Glanskool, piriethoudend.....		7	—		Coal, bright, pyritic.
Skalie, koolstofhoudend.....		4	—		Shale, carbonaceous.
Steenkool, gemeng; hoofsaaklik dof; meer glansend na ondertoe; piriethoudend (44 dm. kern- verlies tussen 972 vt. 4 dm. en 1,024 vt. 4 dm.)	5	3	1,024	4	Coal, mixed, mainly dull; bright towards bottom; pyritic (44 in. core loss between 972 ft. 4 in. and 1,024 ft. 4 in.).
Skalie, vaal, sanderig, en sandsteen	2	0	1,026	4	Shale, grey, sandy, and sandstone

Bg. 140 (verv.)

B.H. 140 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
teenkool, gemeng; hoofsaaklik dof	1	0	1,027	4	Coal, mixed; mainly dull.
andsteen, skalieagtig, vaal.....	11	4	—	—	Sandstone, shaly, grey.
andsteen, wit tot vaal, fyn- tot grofkorrelrig	28	9	—	—	Sandstone, white to grey, fine- to coarse-grained.
andsteen, vaal, skalieagtig; met grofkorrelrige lagies na onder	19	8	—	—	Sandstone, grey, shaly; with coarse-grained bands towards bottom.
kalielagies en sandsteenlagies...	19	10	1,101	10	Shale bands and sandstone bands.

BOORGAT 140 : BERG EN DALEN 1225 : BOREHOLE 140

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recorded	Ware diepte True depth	Nature of strata
52/102	N.G..... Glanskool met heelwat skalie- lagies tot $\frac{1}{2}$ dm. dik; piri- et- en kalsiethoudend	<i>Dm.</i> <i>In.</i> 7 $\frac{1}{2}$ 28	<i>Vt.</i> <i>Ft.</i> 741 —	<i>Dm.</i> <i>In.</i> 11 $\frac{1}{2}$ N.S. Coal, bright, with several sh bands up to $\frac{1}{2}$ in. th pyritic and calcitic.
B	N.G..... Glanskool; skalieagtig in boonste 2 dm.; piri- et en kalsiethoudend	7 16 $\frac{1}{2}$	— —	N.S. Coal, bright; shaly in top 2 pyritic and calcitic.
	N.G..... Glanskool, skalieagtig in mid- delste 2 dm.; kalsiethou- dend	4 27	— 748 10	N.S. Coal, bright; shaly in mid 2 in.; calcitic.
A	N.G..... Glanskool, gelaag; met enkele dun skalielagies; kalsiet- houdend	549 17	— 796 0	N.S. Coal, bright, banded; v occasional thin shale bar calcitic
52/103	N.G..... Glanskool, gelaag, met enkele dun skalielagies; piri- ethoudend	110 $\frac{1}{2}$ 34 $\frac{1}{2}$	809 —	8 $\frac{1}{2}$ N.S. Coal, bright, banded; v occasional thin shale bar pyritic.
D	N.G..... Glanskool, gelaag; skalieagtig in boonste 4 $\frac{1}{2}$ dm.; piri- ethoudend	8 32	— —	N.S. Coal, bright, banded; shal top 4 $\frac{1}{2}$ in.; pyritic.
C	N.G..... Glanskool, gelaag, piriethou- dend	1 26	— 818 2	N.S. Coal, bright, banded, pyri
B	N.G..... Glanskool, gelaag.....	95 $\frac{1}{2}$ 14	— —	N.S. Coal, bright, banded.
	N.G..... Glanskool, gelaag.....	1 $\frac{1}{2}$ 23	— —	N.S. Coal, bright, banded.
A	Glanskool, gelaag, erg sideriet- houdend	2	—	Coal, bright, banded, very s ritic.
	Glanskool, gelaag, piriethou- dend	11	830 5	Coal, bright, banded, pyri
52/104	N.G..... Glanskool, gelaag..... Steenkool, erg sideriethoudend	57 8 2	837 — —	11 N.S. Coal, bright, banded. Coal, very sideritic.
A	Glanskool, gelaag, piri- et- en sideriethoudend	4	—	Coal, bright, banded, py and sideritic.
	N.G..... Glanskool, gelaag, piriethou- dend	2 14	— 840 5	N.S. Coal, bright, banded, pyri
52/105	N.G..... Glanskool, gelaag, skalieagtig in onderste 5 dm.	142 22	860 —	11 N.S. Coal, bright, banded, shal bottom 5 in.
B	N.G..... Glanskool, gelaag, effens kalsiethoudend; sideriet- houdend in onderste helfte	46 14	— 867 9	N.S. Coal, bright, banded, slip calcitic; sideritic in bo half.
	N.G.....	345	—	N.S.

Bg. 140 (verv.)

B.H. 140 (contd.)

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth	Nature of strata	
A	Glanskool, gelaag, met ½ dm. skalie 9 dm. van bo af; piriët-, kalsiet- en sideriet-houdend	Dm. In. 67	Vt. Ft. 902	Dm. In. 1	Coal, bright, banded, with ½ in. shale 9 in. from top; pyritic, calcitic and sideritic.
52/106	N.G.....	197	972	4	N.S.
K	Matkool en koolstofhoudende skalie	24	—	—	Coal, dull, and carbonaceous shale.
J	Steenkool; hoofsaaklik dof..	88	—	—	Coal, mainly dull.
H	Matkool en koolstofhoudende skalie	23	—	—	Coal, dull, and carbonaceous shale.
G	Matkool met ½ dm. skalie 24 dm. van onder af	70	—	—	Coal, dull, with ½ in. shale 24 in. from bottom.
F	Matkool met 3 dm. koolstofhoudende skalie 41 dm. van onder af	70	—	—	Coal, dull, with 3 in. carbonaceous shale 41 in. from bottom.
E	N.G.....	15	—	—	N.S.
	Matkool met 2 dm. vaal skalie 55 dm. van onder af uitgesluit	76	—	—	Coal, dull, with 2 in. grey shale 55 in. from bottom excluded.
	N.G.....	2	—	—	N.S.
D	Steenkool, gemeng.....	9	—	—	Coal, mixed.
	N.G.....	50	—	—	N.S.
C	Steenkool, gemeng, piriethoudend met twee ½ dm. skalie-lagies	52	—	—	Coal, mixed pyritic, with two ½-in. shale bands.
	N.G.....	6	—	—	N.S.
	Steenkool, hoofsaaklik dof; meer glansend by onderent	20½	—	—	Coal, mainly dull coal, brighter at bottom.
B	Skalie, vaal.....	0½	—	—	Shale, grey.
	Glanskool, piriethoudend....	7	—	—	Coal, bright, pyritic.
	N.G.....	4	—	—	N.S.
A	Steenkool, gemeng; hoofsaaklik dof; meer glansend na onder; piriethoudend (44 dm. kernverlies tussen 972 vt. 4 dm. en 1,024 vt. 4 dm.)	63	—	—	Coal, mixed; mainly dull; brighter towards bottom; pyritic (44 in. core loss between 972 ft. 4 in. and 1,024 ft. 4 in.).
	N.G.....	24	—	—	N.S.
A	Steenkool, gemeng; hoofsaaklik dof	12	1,027	4	Coal, mixed; mainly dull.

BOORGAT 140 : BERG EN DALEN 1225 : BOREHOLE 140

ANALYSIS OF AIR-DRIED COAL

ANALISE VAN LUGGEDROOGDE STEENKOOI

No. van B.N.I.-monster F.R.I. sample no.	DIKTE (DM.) THICKNESS (IN.)		RU-STEENKOOI RAW COAL						WASTOETS WASHING TEST		DRYFOET FLOAT						SINK- STOP SINK	
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	Groot- te (Dm.) Size (in.)	S.G.	Op- brengs Yield %	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	
52/102 B	11 549	71½	—	—	23.0	—	—	—	— ^{3/16}	1.40	46.9	—	2.3	8.7	37.7	51.3	4½	35.6
A	164½	17	—	1.7	21.5	34.0	42.8	2½	—	—	—	—	—	—	—	—	—	—
52/103 E	8	34½	—	—	20.9	—	—	—	— ^{3/16}	1.40	46.5	—	2.5	8.9	37.9	50.7	5	31.3
D	1	32	—	—	28.6	—	—	—	— ^{3/16}	1.40	34.3	—	2.6	8.8	35.1	53.5	5½	39.0
C	95½	26	—	—	17.1	—	—	—	— ^{3/16}	1.40	57.7	—	2.8	8.0	35.5	53.7	5½	29.6
B	1½	14	—	—	19.3	—	—	—	— ^{3/16}	1.40	53.3	—	2.2	9.1	35.3	53.4	5½	30.9
A	90	36	—	—	17.3	—	—	—	— ^{3/16}	1.40	60.7	—	2.5	7.9	36.4	53.2	4½	31.9
52/104 A	246	28	—	—	24.5	—	—	—	— ^{3/16}	1.40	40.6	—	2.7	9.2	38.3	49.8	4½	34.9
52/105 C	46	22	—	2.2	21.8	33.1	42.9	2	—	—	—	—	—	—	—	—	—	—
B	345	14	—	2.7	18.6	36.2	42.5	3	—	—	—	—	—	—	—	—	—	—
A	843	67	—	—	20.4	—	—	—	— ^{3/16}	1.40	56.3	—	2.6	7.2	37.4	52.8	4	37.5

BOORGAT 141 : QUAGGAFONTEIN 379 : BOREHOLE 141

Kern 3½ dm.

Core 3½ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sand.....	5	0	5	0	Sand.
Sliksteen met merrellagies, rooi..	50	0	—	—	Siltstone with marl bands, red.
Sliksteen, ligrooi.....	3	0	—	—	Siltstone, light red.
Sliksteen en moddersteen, rooi, met rooi en per sgevlekte merrel- lae	222	9	—	—	Siltstone and mudstone, red, with red and purple mottled marl bands.
Sliksteen, vaalpers, mikahoudend (Rooilae)	6	6	287	3	Siltstone, grey-purple, micaceous (Red Beds).
Sandsteen met grintsteenlense, wit, bruin en vaalpers (Moltenolae)	36	9	324	0	Sandstone with grit lenses, white brown and grey - purple (Molteno Beds).
Moddersteen, bruinrooi in boonste helfte, pers tot bruin in onderste helfte; onderste 12 dm. kalk- houdend	41	0	—	—	Mudstone, brown-red in top half and purple to brown in bottom half; bottom 12 in calcareous.
Moddersteen, rooibruin, met vaal- pers lagies; word meer na onder toe	35	0	401	0	Mudstone, red-brown, with grey purple bands; becomes more grey towards bottom.
Moddersteen, vaal, met enkele bruin lae in boonste deel; plek- plek kom kalsietare voor	92	2	493	2	Mudstone, grey, with occasional brown bands towards top. Calcic veins appear in places.
Moddersteen, vaal.....	31	7	524	9	Mudstone, grey.
Skalie, vaalswart; effens koolstof- houdend	5	7	530	4	Shale, grey-black, slightly carb- naceous.
Glanskool, gelaag, taamlik skalie- agtig; piriethoudend; erg kalsiet- houdend	11	—	—	—	Coal, bright, banded, fairly shal- pyritic; very calcitic.
Skalie met 'n bietjie glanskool...	1	6	532	9	Shale with a little bright coal.
Glanskool, gelaag, kalsiethoudend, effens piriethoudend; boonste 6 dm. minderwaardig	2	3	535	0	Coal, bright, banded, calcitic, slightly pyritic; top 6 in. inferior.
Skalie, swart en vaalswart; met enkele steenkoolagies	18	10	—	—	Shale, black and grey-black; with occasional coal-bands.
Skalie met baie steenkoolagies en pirietknolle	16	3	570	4	Shale with many thin coal-bands and pyrite nodules.
Glanskool, skalieagtig by bo-ent...	11	—	—	—	Coal, bright, shaly towards top.
Skalie met dun steenkoolagies...	2	8	574	0	Shale with thin coal-bands.
Glanskool met baie dun skalie- agtige lagies; kalsiet- en piriet- houdend	1	3	—	—	Coal, bright, with many thin shale bands; calcitic and pyritic.
Skalie met enkele steenkoolstrepies	—	5½	—	—	Shale with occasional coal-streaks.
Glanskool met baie dun skalie- lagies en ses ½ dm. tot 1 dm. skalielagies; piriet- en kalsiet- houdend	2	8	—	—	Coal, bright, with many thin shale bands and six ½-in. to 1-in. shale bands; pyritic and calcitic.
Skalie.....	—	4½	—	—	Shale.
Glanskool en skalie; tussengelaag	—	10½	—	—	Coal, bright, and shale, inter- bedded.
Skalie met 'n bietjie glanskool...	—	7	—	—	Shale with a little bright coal.
Glanskool, kalsiethoudend.....	—	7½	—	—	Coal, bright, calcitic.
Skalie.....	—	3	—	—	Shale.
Glanskool en skalie, tussengelaag.	—	11	—	—	Coal, bright, and shale, inter- bedded.
Skalie, tussengelaag met glanskool in middel	1	1	—	—	Shale interbedded with bright coal in middle.
Glanskool met enkele dun skalie- lagies by bo- en onderent; kalsiet- en piriethoudend	2	5	—	—	Coal, bright, with an occasional thin shale band at top and bottom; calcitic and pyritic.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	<i>Vt.</i> <i>Ft.</i>	<i>Dm.</i> <i>In.</i>	<i>Vt.</i> <i>Ft.</i>	<i>Dm.</i> <i>In.</i>	
Skalie.....		11			Shale.
Glanskool, gelaag; skalieagtig by bo- en onderent; kalsiet en piriethoudend, bros, plek-plek met wryfvlakke	2	8	589	1	Coal, bright, banded; shaly at top and bottom; calcitic and pyritic, friable, with slickensides in parts.
Skalie met 1 dm. glanskool in middel		6	—		Shale with 1 in. bright coal in middle.
Glanskool, skalieagtig veral in onderste helfte	1	4	—		Coal, bright, shaly especially in bottom half.
Skalie met dun steenkoollagies..	9	0	—		Shale with thin coal-bands.
Skalielagies en steenkoollagies...	1	8	601	7	Shale bands and coal-bands.
Glanskool, gelaag; skalieagtig in middelste 2 dm	2	8	—		Coal, bright, banded; shaly in middle 2 in.
Skalie.....		2	—		Shale.
Glanskool en skalie, tussengelaag.	1	9	606	2	Coal, bright, interbedded with shale.
Skalie met baie steenkoollagies...	47	4	653	6	Shale with many coal-layers.
Glanskool, gelaag; $\frac{1}{2}$ dm. skalie naby middel; kalsiet- en piriethoudend	2	6	—		Coal, bright, banded; $\frac{1}{2}$ in. shale near middle; calcitic and pyritic.
Skalie, koolstofhoudend.....		7	—		Shale, carbonaceous.
Glanskool, gelaag, plek-plek effens skalieagtig	1	10	—		Coal, bright, banded, slightly shaly in parts.
Skalie, koolstofhoudend.....		5	—		Shale, carbonaceous.
Glanskool, gelaag, skalieagtig na onder	1	2	660	0	Coal, bright, banded, shaly towards bottom.
Skalie met baie steenkoollagies en verskeie piriethoude	42	6	—		Shale with many coal-bands and several pyrite nodules.
Skalie, sanderig.....		4	—		Shale, sandy.
Skalie met baie steenkoollagies..	22	2	—		Shale with many coal-bands.
Skalie, vaal, plek-plek sanderig; bevat baie wryfvlakke	5	4	—		Shale, grey; sandy in parts; con- tains many slickensides.
Grintsteen.....		6	730	10	Grit.
Skalie; vaal en swart lagies om die beurt; 'n paar duim steen- kool by bo-ent	12	0	—		Shale; alternating black and grey bands; a few inches coal at top.
Skalie; swart lagies en sanderige lagies om die beurt	3	0	—		Shale; black bands and sandy bands alternating.
Skalie, swart.....	5	0	—		Shale, black.
Skalie, steenkoolagtig en erg sanderig thoudend	2	0	753	0	Shale, coaly and very sideritic.
Sandsteen en sanderige skalie....	3	0	—		Sandstone and sandy shale.
Skalie, swart lagies en sanderige lagies om die beurt	3	6	—		Shale, black bands and sandy bands alternating.
Sandsteen, gry.....	8	8	768	2	Sandstone, grey.
Skalie, swart lagies en sanderige lagies om die beurt	10	8	—		Shale, black bands and sandy bands alternating.
Sandsteen.....	2	8	—		Sandstone.
Skalie.....	1	9	—		Shale.
Sandsteen.....	3	3	786	6	Sandstone.
Skalie, swart, gedeeltelik steen- koolagtig, erg sanderiethoudend	2	0	—		Shale, black, partly coaly, very sideritic.
Skalie, sanderig, met koolstofhou- dende gedeeltes	6	6	—		Shale, sandy, with carbonaceous parts.
Sandsteen, gry.....	11	0	—		Sandstone, grey.
Skalie, steenkoolagtig.....		3	—		Shale, coaly.
Sandsteen, wit.....		8	—		Sandstone, white.
Skalie, swart.....	1	2	808	4	Shale, black.

Bg. 141 (verv.)

B.H. 141 (contd.)

Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth	Nature of strata
	Vt. Ft. Dm. In.	Vt. Ft. Dm. In.	
Skalie, koolstofhoudend; met 5 dm. matkool 7 dm. van onder af	2 11	811 3	Shale, carbonaceous; with 5 dull coal 7 in. from bottom
Skalie, sanderig.....	1 0	—	Shale, sandy.
Skalie, swart, met steenkoolstrepe	1 6	—	Shale, black with coal-streaks.
Sandsteen.....	1 3	815 0	Sandstone.

BOORGAT 141 : QUAGGAFONTEIN 379 : BOREHOLE 141

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
			Dm. In.	Vt. Ft.	
52/ 99 A	N.G. Glanskool, gelaag, kalsiethou- dend, effens piriethoudend; boonste 6 dm. minderwaar- dig	18 27	532 535	9 0	N.S. Coal, bright, banded, calcitic, slightly pyritic; top 6 in. inferior.
52/100 E	N.G. Glanskool met baie dun skalie- agtige lagies; kalsiet- en piriethoudend	32 15	574	0	N.S. Coal, bright, with many thin shaly bands; calcitic and pyritic.
D	N.G. Glanskool met baie dun skalie- lagies en ses $\frac{1}{2}$ dm. tot 1 dm. skalielagies; piri- en kal- siethoudend	5 $\frac{1}{2}$ 32	—	—	N.S. Coal, bright, with many thin shale bands and six $\frac{1}{2}$ -in. to 1-in. shale bands; pyritic and calcitic.
C	N.G. Glanskool en skalie, tussen- gelaag	4 $\frac{1}{2}$ 10 $\frac{1}{2}$	—	—	N.S. Coal, bright, and shale, inter- bedded.
	N.G. Glanskool, kalsiethoudend...	7 7 $\frac{1}{2}$	—	—	N.S. Coal, bright, calcitic.
	N.G. Glanskool en skalie, tussen- gelaag	3 11	—	—	N.S. Coal, bright, and shale, inter- bedded.
	N.G. Glanskool met enkele dun skalielagies by bo- en onder- ent; kalsiet- en piriethou- dend	13 29	—	—	N.S. Coal, bright, with an occasional thin shale band at top and bottom; calcitic and pyritic.
B	N.G. Glanskool, gelaag; skalieagtig by bo- en onderent; kalsiet- en piriethoudend, bros, plek-plek met wryfvlakke	11 32	—	—	N.S. Coal, bright, banded; shaly at top and bottom; calcitic and pyritic, friable, with slicken- sides in parts.
52/101 B	N.G. Glanskool, gelaag; skalieagtig in middelste 2 dm.	20 32	601	7	N.S. Coal, bright, banded; shaly in middle 2 in.
A	N.G. Glanskool en skalie, tussen- gelaag	2 21	606	2	N.S. Coal, bright, interbedded with shale.
52/253 C	N.G. Glanskool, gelaag; $\frac{1}{2}$ dm. skalie naby middel; kalsiet- en piriethoudend	568 30	653	6	N.S. Coal, bright, banded; $\frac{1}{2}$ in. shale near middle; calcitic and pyritic.
B	N.G. Glanskool, gelaag, plek-plek effens skalieagtig	7 —	—	—	N.S. Coal, bright, banded, slightly shaly in parts.
A	N.G. Glanskool, gelaag, skalieagtig na onder	5 14	660	0	N.S. Coal, bright, banded, shaly towards bottom.

BOORGAT 142 : DURHAM 1280 : BOREHOLE 142

Kern 3½ dm.

Core 3½ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Sand.....	8	0	8	0	Sand.
Konglomeraat, swak, gekonsolideer (Tersiër)	29	0	37	0	Conglomerate, badly consolidated (Tertiary).
Sandsteen.....	1	0	—	—	Sandstone.
Sandsteen, wit, fynkorrelrig, plekplek kleierig	5	5	—	—	Sandstone, white, fine-grained, clayey in parts.
Sandsteen, kleierig, en kleipil-konglomeraat; wit tot rooi	2	3	—	—	Sandstone, clayey, and clay-pellet conglomerate; white to red.
Sandsteen met verskeie grintsteenlagies; wit (Moltenolae)	10	10	62	0	Sandstone, with several grit bands; white (Molteno Beds).
Moddersteen, vaal en ligrooi....	22	6	—	—	Mudstone, grey and light red.
Moddersteen, bruin; vaalpers na onder	36	0	—	—	Mudstone, brown; grey-purple towards bottom.
Moddersteen, vaalpers bo en vaal onder	51	0	—	—	Mudstone, grey-purple towards top and grey towards bottom.
Skalie, vaal; met enkele steenkoolstrepe in boonste 5 vt.; kalsiethoudend	12	6	195	0	Shale, grey; with occasional coal-stringers in top 5 ft.; calcitic.
Skalie, vaal.....	3	6	198	6	Shale, grey.
Skalie, swart, met baie steenkoollagies	30	0	—	—	Shale, black, with many coal-bands.
Skalie, swart, met enkele steenkoollagies; erg verbrokeel; baie nate daarin	15	9	—	—	Shale, black, with an occasional coal-band; very much crumbled; many joints in it.
Skalie, erg kalsiethoudend.....	1	10	—	—	Shale, very calcitic.
Skalie, swart, met steenkoollagies	26	0	304	3	Shale, black, with coal-bands.
Glanskool, gelaag; met 'n 3 dm. skalielaag 4 dm. van onder af; skalieagtig in boonste deel	2	6	—	—	Coal, bright, banded; with a 3-in. shale band 4 in. from bottom; shaly towards top.
Skalie, swart.....	1	4	308	1	Shale, black.
Glanskool, gelaag, erg piriët, kalsiet- en sideriethoudend; onderste 6 dm. skalieagtig	4	0	312	7	Coal, bright, banded, very pyritic, calcitic and sideritic; bottom 6 in. shaly.
Skalie, swart, met enkele steenkoollagies	11	2	—	—	Shale, black, with an occasional coal-band.
Skalie, vaal, effens sanderig.....	—	11	—	—	Shale, grey, slightly sandy.
Skalie, swart, met enkele steenkoollagies	10	10	335	11	Shale, black, with an occasional coal-band.
Skalie, sanderig, met enkele wit sandsteenlagies	33	0	—	—	Shale, sandy, with an occasional white sandstone band.
Sandsteen, wit.....	4	9	—	—	Sandstone, white.
Skalie, vaal, sanderig.....	2	7	—	—	Shale, grey, sandy.
Grintsteen, veldspaties.....	6	6	—	—	Grit, felspathic.
Skalie met enkele sandsteenlagies in boonste gedeelte	13	5	—	—	Shale, with occasional sandstone bands in top portion.
Sandsteen, wit.....	5	3	—	—	Sandstone, white.
Skalie, vaal, gedeeltelik sanderig.	8	10	—	—	Shale, grey, partly sandy.
Grintsteen, veldspaties.....	2	9	413	0	Grit, felspathic.

BOORGAT 142 : DURHAM 1280 : BOREHOLE 142

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth	Nature of strata
52/254 B	N.G..... Glanskool, gelaag; met 'n 3 dm. skalielaag 4 dm. van onder af uitgesluit; skalie- agtig in boonste deel	<i>Dm.</i> <i>In</i> 312 30	<i>Vt.</i> <i>Fl.</i> 304 —	N.S. Coal, bright, banded; with 3-in. shale band 4 in. from bottom excluded; shale towards top.
A	N.G..... Glanskool, gelaag; erg piriet-, kalsiet- en sideriethoudend; onderste 6 dm. skalieagtig (6 dm. kern hier verloor)	16 48	— 312 7	N.S. Coal, bright, banded, ver- pyritic, calcitic and sideritic bottom 6 in. shaly (6 in. cor- lost here).

BOORGAT 142 : DURHAM 1280 : BOREHOLE 142

ANALISE VAN LUGGEDROOGDE STEENKOOI ANALYSIS OF AIR-DRIED COAL

No. van B.N.I.-monster F.R.I. sample no.	DIKTE (DM.) THICKNESS (IN.)		RU-STEENKOOI RAW COAL						WASTOETS WASHING TEST		DRIESTOF FLOAT						SINK- STOF SINK	
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W.	H ₂ O	As	V.B.	V.K.	Swel- syfer Swel- ling number	Groot- te (Dm.) Size (In.)	S.G.	Op- brengs Yield	V.W.	H ₂ O	As	V.B.	V.K.	Swel- syfer Swel- ling number	As Ash %
			C.V.	%	Ash	V.M.	F.C.	number			%	C.V.	%	Ash	V.M.	F.C.	number	
			lb./lb.	%	%	%	%				lb./lb.	%	%	%	%	%		
52/254 B	3	37	—	—	30.7	—	—	—	— ^{3/16}	1.40	35.3	—	3.1	8.6	35.4	52.9	3½	42.7
A	16	48	—	—	24.5	—	—	—	— ^{3/16}	1.40	39.1	—	3.0	7.1	35.8	54.1	3½	35.6

BOORGAT 143 : VRYPLAATS 506 : BOREHOLE 143

Kern 3½ dm.

Core 3½ in.

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Oppervlakkalksteen.....	5	0	5	0	Surface-limestone.
Sandsteen, wit, fynkorrelrig (Hol- kranssandsteen)	71	0	76	0	Sandstone, white, fine - grained (Cave Sandstone).
Sliksteen- en merrellae om die beurt; rooibruin en plek-plek wit; plek-plek goedgelaag	99	0	—	—	Siltstone and marl in alternat- ing bands; reddish-brown and white in parts; well bedded in parts.
Sliksteen met enkele kalkhoudende knolle; rooibruin	131	0	—	—	Siltstone with occasional calca- reous nodules; reddish-brown.
Moddersteen met verskeie dun merrellagies; donkerbruin (Rooilae)	76	0	382	0	Mudstone with some thin marl bands; dark-brown (Red Beds).
Moddersteen, rooibruin, grintag- tig; gaan oor in kleiagtige grint- steen na onder	8	0	—	—	Mudstone, reddish-brown, gritty; changes into a clayey grintstone towards bottom.
Grintsteen, rooiwit, kruisgelaag, met groen skalielense in onder- ste deel	9	4	399	4	Grit, reddish-white, cross-bedded with green shale bands toward bottom.
Grintsteen, rooiwit, kruisgelaag..	11	6	—	—	Grit, reddish-brown, cross-bedded.
Skalie, groen.....	2	—	—	—	Shale, green.
Grintsteen, wit.....	3	7	—	—	Grit, white.
Skalie, groen.....	3	—	—	—	Shale, green.
Grintsteen, wit, met 'n groen, sanderige skalielaag by onderent (Moltenolae)	4	8	419	10	Grit, white, with a green sand- stone band at bottom (Molten Beds).
Moddersteen, bruin en vaalpers..	26	4	446	6	Mudstone, brown and greyish purple.
Moddersteen.....	145	3	591	9	Mudstone.
Glanskool, gelaag, kalsiethoudend	10	—	—	—	Coal, bright, banded, calcitic.
Skalie.....	10	—	—	—	Shale.
Glanskool, gelaag, erg piriethou- dend	11	—	—	—	Coal, bright, banded, very pyritic.
Skalie.....	6	—	—	—	Shale.
Glanskool, gelaag, skalieagtig en piriethoudend in boonste deel	2	1	597	1	Coal, bright, banded, shaly and pyritic towards top.
Skalie.....	28	6	—	—	Shale.
Glanskool, gelaag, kalsiethoudend	1	2	—	—	Coal, bright, banded, calcitic.
Skalie.....	14	3	—	—	Shale.
Glanskool, gelaag, effens piriethou- dend by bo-ent	2	0	643	0	Coal, bright, banded, slightly pyritic towards top.
Skalie.....	10	0	—	—	Shale.
Skalie en glanskool.....	2	—	—	—	Shale and bright coal.
Skalie.....	2	—	653	4	Shale.
Glanskool, gelaag, taamliek skalie- agtig bo en in middel	3	1	—	—	Coal, bright, banded, fairly shaly towards top and in middle.
Glanskool, gelaag, effens piriethou- dend en skalieagtig in middel	2	7	—	—	Coal, bright, banded, slightly pyritic and shaly in middle.
Skalie.....	7	—	—	—	Shale.
Glanskool, gelaag.....	1	9	—	—	Coal, bright, banded.
Skalie.....	8	—	—	—	Shale.
Glanskool, gelaag, erg skalieagtig en sideriethoudend onder	2	1	—	—	Coal, bright, banded, very shaly and sideritic towards bottom.
Skalie.....	1	1	—	—	Shale.
Glanskool, gelaag; met 1½ dm. skalie 10 dm. van bo af; kalsiet- en piriethoudend	1	6	666	8	Coal, bright, banded; with 1½ in. shale 10 in. from top; calcitic and pyritic.
Skalie en sanderige skalie.....	83	4	—	—	Shale and sandy shale.
Sandsteen.....	1	4	—	—	Sandstone.

Bg. 143 (verv.)

B.H. 143 (contd.)

Aard van lae	Dikte verkry Thickness recovered		Ware diepte True depth		Nature of strata
	Vt. Ft.	Dm. In.	Vt. Ft.	Dm. In.	
Skalie.....	3	8	—	—	Shale.
Sandsteen.....	52	9	—	—	Sandstone.
Skalie.....	7	0	814	9	Shale.
Skalie, koolstofhoudend.....	3	1	—	—	Shale, carbonaceous.
Sandsteen.....	49	5	867	3	Sandstone.

(Boorman se staat vanaf 446 vt. 6 dm.).

(Driller's record from 446 ft. 6 in.).

BOORGAT 143 : VRYPLAATS 506 : BOREHOLE 143

No. van B.N.I.- monster F.R.I. sample no.	Aard van lae	Dikte verkry Thickness recovered	Ware diepte True depth		Nature of strata
		Dm. In.	Vt. Ft.	Dm. In.	
52/427	N.G.....	—	—	—	N.S.
E	Glanskool, gelaag, kalsiethou- dend	10	591	9	Coal, bright, banded, calcitic.
	N.G.....	10	—	—	N.S.
D	Glanskool, gelaag, erg piriethou- dend	11	—	—	Coal, bright, banded, very pyritic.
	N.G.....	6	—	—	N.S.
C	Glanskool, gelaag, skalieagtig en piriethoudend na bo	25	597	1	Coal, bright, banded, shaly and pyritic towards top.
	N.G.....	342	—	—	N.S.
B	Glanskool, gelaag, kalsiethou- dend	14	—	—	Coal, bright, banded, calcitic.
	N.G.....	171	—	—	N.S.
A	Glanskool, gelaag, effens piriethoudend by bo-ent	24	643	0	Coal, bright, banded, slightly pyritic towards top.
52/428	N.G.....	2	653	4	N.S.
E	Glanskool, gelaag, taamlik skalieagtig bo en in middel	37	—	—	Coal, bright, banded, fairly shaly towards top and in middle.
	N.G.....	7	—	—	N.S.
D	Glanskool, gelaag, effens piriethoudend en skalieagtig in middel	31	—	—	Coal, bright, banded, slightly pyritic and shaly in middle.
	N.G.....	21	—	—	N.S.
C	Glanskool, gelaag.....	8	—	—	Coal, bright, banded.
	N.G.....	25	—	—	N.S.
B	Glanskool, gelaag, erg skalie- agtig en sideriethoudend na onder	13	—	—	Coal, bright, banded, very shaly and sideritic towards bottom.
	N.G.....	18	—	—	N.S.
A	Glanskool, gelaag; met 1½ dm. skalie 10 dm. van bo af; kalsiet- en piriethoudend	18	666	8	Coal, bright, banded; with 1½ in. shale 10 in. from top; calcitic and pyritic.

BOORGAT 143 : VRYPLAATS 506 BORE-HOLE 143

ANALISE VAN LUGGEDROOGDE STEENKOOI

ANALYSIS OF AIR-DRIED COAL

No. van B.N.I.-monster F.R.I. sample no.	DIKTE (DM.) THICKNESS (IN.)		RU-STEENKOOI RAW COAL						WASTOETS WASHING TEST		DRYSTOF FLOAT						SINK- STOF SINK		
	Uit- gesluit Excluded	Ge- mon- ster Sam- pled	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	Groot- te (Dm.) Size (In.)	S.G.	Op- brengs Yield %	V.W. C.V. lb./lb.	H ₂ O %	As Ash %	V.B. V.M. %	V.K. F.C. %	Swel- syfer Swel- ling number	As Ash %	
52/427	E	—	10	—	30.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	D	—	10	—	31.7	—	—	—	— ^{3/16}	1.40	28.3	—	—	—	—	—	—	—	—
	C	—	6½	—	—	—	—	—	— ^{3/16}	1.40	48.9	—	2.2	9.9	38.3	49.6	4	36.9	
	B	—	341½	—	32.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	A	—	171	—	18.6	—	—	—	— ^{3/16}	1.40	59.8	—	2.2	11.2	36.8	49.8	4	29.7	
52/428	E	—	124	—	23.9	—	—	—	— ^{3/16}	1.40	41.9	—	2.3	10.2	36.2	51.3	5	33.7	
	D	—	31	—	27.6	—	—	—	— ^{3/16}	1.40	37.3	—	2.3	9.7	35.6	52.4	5	38.2	
	C	—	7	—	17.8	—	—	—	— ^{3/16}	1.40	50.4	—	2.1	10.4	36.7	50.8	5½	25.4	
	B	—	8	—	28.4	—	—	—	— ^{3/16}	1.40	28.6	—	2.3	8.9	35.6	53.2	5	36.2	
	A	—	13	—	1.8	29.7	29.5	39.0	3	— ^{3/16}	1.40	36.2	—	—	—	—	—	—	—

